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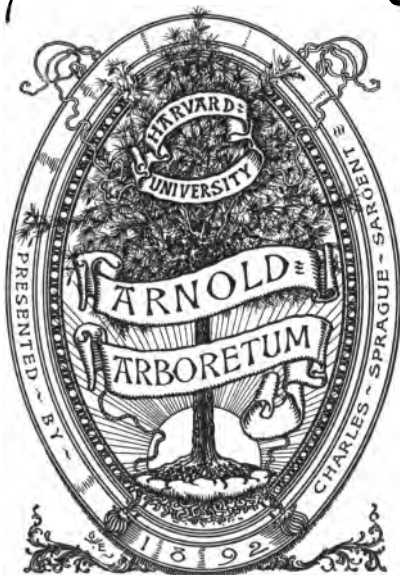
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DEPOSITED AT THE
HARVARD FOREST
1943

RETURNED TO J. P.
MARCH, 1967





COLONIAL AND INDIAN EXHIBITION,

LONDON, 1886.

#

Cape Colony, So. Africa

CATALOGUE OF THE EXHIBITS OF THE COLONY OF THE CAPE OF GOOD HOPE.

LONDON : RICHARDS, GLANVILLE & CO.,

"THE EMPIRE" OFFICE, ST. MARY AXE.

1886.

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MAPS, STATISTICS, PUBLIC WORKS.

1. Cape Commission.

Hand Book of the Cape Colony. Edited by John Noble, Clerk of the House of Assembly, Cape Town. Printed by W. A. Richards, and Sons, Government Printers, Cape Town; and Illustrated and Published by Saul Solomon & Co., of the same City.

Copies of this Handbook can be obtained in the Cape Court.

2. Cape Commission.

(1.) Map of the Cape Colony—showing physical features, railways, telegraphs, &c. Prepared under the direction of A. de Smidt, the Surveyor-General of the Colony.

(2.) A series of maps showing the results of the latest surveys.

- (a) Set of 800 scale sheets of Map of Colony.
- (b) Transkeian Territories.
- (c) East London Division.
- (d) King William's Town Division.
- (e) Province of Griqualand West.
- (f) Great Namaqualand.
- (g) Harbour Works, Cape Town. Lithographed Plans.
- (h) Port Elizabeth. Ditto.
- (j) Kowie. Ditto.
- (k) East London. Ditto.

(3.) Statistical Diagrams illustrating—

- (a) Leading Events in the History of the Cape Colony.
- (b) Area and Population.
- (c) Occupation and Cultivation of Soil.
- (d) Revenue and Expenditure for 1884-85.
- (e) Imports and Exports.
- (f) Railways and Telegraphs.
- (g) Harbour and Dock Accommodation.
- (h) Wine Produce.
- (i) Wool Production.
- (k) Feather Output.
- (l) Mining.
- (m) Climatology.

(4.) A Series of 13 Diagrams showing

(a) The Rainfall of the Cape Colony for each month of the year.

(b) The average Rainfall for the whole year.

These Diagrams have been compiled in the Hydraulic Engineer's Department, Capetown, from statistics collected by J. G. Gamble, M.A., M. Inst. C.E., Hydraulic Engineer.

(5.) Panorama of Capetown, painted for the Commission by J. L. Pickering of Boro' Green, Kent.

(6.) Photographs of Public Works, collected by the Public Works Department, Capetown.

(7.) Botanical Map of the Cape Colony, prepared by Henry Bolus, F.S.S.

3. The Astronomer Royal (D. Gill, F.R.S., F.R.A.S., &c.), CAPETOWN.

Views of the Royal Observatory.

A Series of Stellar Photographs taken at the Royal Observatory.

4. Table Bay Harbour Board CAPETOWN.

(1.) Model of existing and proposed Docks at Table Bay.

The Inner Harbour or "Alfred Dock" is $8\frac{1}{2}$ acres in extent, and is in communication with the Graving Dock (*vide* Picture in Entrance Hall). It is also fitted at the South end with a patent slip. The Graving Dock is 600 feet in length on the keel blocks and is capable of holding any of Her Majesty's ships. The outer harbour is 62 acres in extent, and is to be protected by a breakwater of over two-thirds of a mile in length. This breakwater has already attained a length of 2,530 feet.

(2.) Sample of Granite from the Paarl used in the construction of the above mentioned Graving Dock.

5. Smith, G.W., C.E. PORT ELIZABETH.

Plan of Coast Line from Gamtoos River to Kowie Point.

Plan of Anchorage, Algoa Bay.

Lent by the Algoa Bay Harbour Board.

NATIVE DEPARTMENT.

6. Cape Commission.

- (1.) Kafir Kraal and Bushman Hut. These habitations are situated in the Exhibition Grounds opposite the Malay location. They are occupied by four Kafirs, and by a bushman and his wife, who will carry on their respective native industries, including the manufacture of weapons, sticks, baskets, wickerwork mats, sieves, bead-work, and wire ornaments. An addition to this interesting community is expected during the Exhibition.
- (2.) Native Implements from Basutoland, collected for the Commission by Colonel Clarke, R.A., C.M.G., British Resident at Maseru, including:—

Axes, knobsticks, walking-sticks, women's brass collars, bracelets of brass and copper, bead collars and necklaces, copper and brass wire-bracelets, brooches, native woman's dress and chatelaine, hats, babies' woollen dresses (the work of children at the Native Training School, Romer Mission Station), water jars, caraffes, and sugar basins.

- (3.) Native Implements, collected by the Commission by Mr. Scott, Northern Border Commissioner.

7. Bain, Thomas, C.E. RONDEBOSCH.

Collection of Bushman Stone Implements.

- No. 1-10.—Perforated grind or Mill Stones, with stick fixed to No. 1. to show method of use in grinding.
- 11-24.—Perforated stones used as weights attached to sticks and horns for digging out edible roots and bulbs; also used for grinding, and as weapons of defence in close quarters.
- 25-26.—Gemsbuck Horns, with stone weights fixed for digging—illustrating the above.
- 27-36.—Perforated Stones used as weights for digging, and as weapons of defence.
- 37-40.—Perforated Stones used as hammers.
- 41-50.—Half-finished perforated Stones with drill marked A attached to Stone No. 42, shewing method of boring.
- 51-58.—Light perforated Stones, evidently used by women and children for digging.
- 59-62.—Very small perforated Stones, said to be used as weights.
- 63.—Perforated Stone Wheel with ground edge (rare specimen).
- 64-66.—Perforated pieces of Stone, broken while being manufactured.

AXES.

- 57-68.—Stone Choppers for large game.
- 69-108.—Stone Choppers of various sizes, and for various uses.
- 109-112.—Stone Pestle and Mortar.

STONE DRILLS OR BORES.

- 113-121.—Drills for boring holes in Stones.
- 122-A.—Drill attached to half perforated Stone, No. 42.
- 123.—Small Crystal Drill.

PESTLES.

- 124-125.—Stone Pestles (bevelled).
- 126.—Six-grooved Stone for sharpening and grinding arrow shafts (a rare specimen).
- 127.—Hard Stone, with one groove, which is heated when used for straightening arrows upon (a rare specimen).
- 128-129.—Cores of hard Stones, from which arrow heads have been chipped.
- 130.—Red paint Stone (perforated), used with a wooden shaft to grind paint. The paint is mixed with fat when used; will come off readily when wetted.
- 131-172.—Grind Stones or Pestles of various sizes and shapes.
- 173.—Large Stone, with paintings in red Bushman paint, of two Eland.
- 174.—Blade Bone of Seal, with paintings of Bird and Seal, &c., in black.
- 175.—Hottentot Clay Pot complete (very rare).
- 176.—Bushman Clay Pot complete (very rare).
- 177.—Small Toy Pot of Bushmen (very rare).
- 178.—Parcel containing 10 Pot Ears, and 7 pieces of Pottery of various kinds.
- 179.—Parcel containing 30 little Stone Skin Scrapers.
- 180.—Small Cardboard Box containing two Stone Beads of Bushmen (very rare).
- 181.—Buffalo Bone Implement for scraping skins, &c. (rare).

ARROW-HEADS, &c.

- 182.—Arrow-Head, with fumigenous piece of rock attached, shewing great antiquity.
- 183.—Cardboard with 30 Arrow-heads fixed to it, from different parts of the Colony.
- 184.—Parcel containing harpoon, very rudely made, and 83 Stone Implements, Knives, Saws, Spear-heads, and Scrapers (many incomplete), from different parts of the Colony.
- 185.—Effigy of Bushman in full costume.
- 186.—Effigy of Bush Woman in full costume.
- 187.—Kafir Piano from Zambesi, of unique manufacture.
- 188.—Large Stone Mortar without Pestle.
- 189.—Piece of Limestone with circular grooves, made by Bushmen.
- 190.—A Bushman Pot.

8. Clarke, J. INGOBO.
Kafir Beads.

9. Currey, Charles. CAPETOWN.
Four Bushman Drawings; facsimiles of G. W. Stow's copies from the originals.

- 1.—"Attacking the Elephant."
From small cave in Bushman's Hook, near the Caledon River, Orange-Free State.
- 2.—"Attacking the Lion."
From great cave in precipitous ravine, Morning Sun, Orange Free State.
- 3.—Group of Eland and Hunters; some in hunting disguise. At foot of great precipice, Klein Aasvogel Kop, Orange Free State.
- 4.—Group of Giraffe, Rhinoceros, Spring Buck and Zebra; with representatives of two tribes of Bushmen, the Long and Short Bows.

10 Dunn, E. J., F.G.S. CAPE COLONY.

Collection of Stone Implements.

MEALING STONES.

- | | | |
|------|-----------------------------------------------------|------------------------------------|
| A 1. | Granite, from Crocodile R. (E), Transvaal | Kafir (previous to Zulu Invasion). |
| 2. | Dolerite „ Indwe, Cape Colony | Kafir (Tambookie). |
| 3. | Sandstone „ Lange Fontein, Camdeboo C. C. | Hottentot or Bushman. |
| 4-5. | „ „ Cape Flats, Capetown | Hottentot. |

PERFORATED STONES.

- | | | |
|--------|--------------------------------------------------------|---------------------------------|
| B 1. | Intrusive Rock, from Nels River Gold Fields, Transvaal | Kafir (prior to Zulu Invasion). |
| 2. | Sandstone „ Camdeboo, C. C. | Hottentot. |
| 3. | „ „ Kust, Camdeboo. | „ |
| 4. | „ „ Palmiet, Fontein, Camdeboo | „ |
| 5. | „ „ Kruis Kloof, Camdeboo. | „ |
| 6. | „ „ Kruid Fontein, Aberdeen, C.C. | „ |
| 7. | „ „ Aberdeen Rd C.C. | Hottentot or Bushman. |
| 8. | „ „ Mt. Stewart, C.C. | „ |
| 9-10 | „ „ Klip Fontein, Stormberg | Bushman. |
| 11. | Steatite „ MacMac Gold Field, Transvaal. | „ |
| 12-13. | Sandstone „ Oaklands Cape Flats | Hottentot or Bushman. |
| 14. | „ „ Aliwal N., C.C. | Bushman. |
| 15. | „ „ Vaal River Delpot's Hope, C.C. | „ |
| 16. | „ „ Lange Fontein, Camdeboo, C.C. | Hottentot or Bushman. |
| 17. | „ „ Constantia, near Cape Town | „ |
| 18. | „ „ Indwe, C.C. | Bushman. |
| 19. | „ „ Cape Flats | Hottentot. |
| 20. | „ „ Modder Bult, Stormberg | Bushman. |
| 21. | „ „ Stormberg, C.C. | „ |
| 22. | „ „ Streef Fontein, Stormberg, C.C. | „ |
| 23. | „ „ Leeuwe Fontein, Stormberg | „ |
| 24. | Intrusive Rock „ Kruis Kloof, Camdeboo | „ |
| 25. | „ „ Vreede Kloof, Camdeboo | „ |
| 26. | Sandstone „ Kruis Kloof, Camdeboo | „ |
| 27. | „ „ Paarde Kraal, Stormberg, C.C. | „ |
| 28. | Falcon „ Kaap Valley, Transvaal. | „ |
| 29. | Sandstone „ Indwe, C.C. | „ |
| 30. | Quartz Rock „ Van der Walts Kloof, Camdeboo | „ |
| 31. | Sandstone „ Cape Flats, near Cape Town | Hottentot or Bushman. |
| 32. | „ „ Stormberg, C.C. | Bushman. |
| 33. | Quartz Rock „ Camdeboo, C.C. | „ |
| 34. | Steatite „ Pniel, Vaal River, C.C. | „ |

MULLERS.

- | | | |
|------|---------------------------------------------------------------------|--------|
| C 1. | Intrusive Rock from Valley of Crocodile R. (E.) Transvaal | Kafir. |
| 2. | Sandstone „ Kabousie, near Queenstown, C.C. | „ |
| 3. | Intrusive Rock „ Kabousie, near Queenstown, C.C. | „ |
| 4. | Sandstone „ Beton Kantoer, Transvaal | „ |
| 5. | Intrusive Rock „ Pretorius Kop, Transvaal | „ |
| 6. | Sandstone „ Crocodile R., (E.) Transvaal | „ |

7.	Intrusive Rock	from	Nel's River, Transvaal.	Kafir.
8.	"	"	Moodies Gold Field, Transvaal.	"
9-10	"	"	Crocodile R., (E.) Transvaal	"
11.	"	"	Spitz Kop, Gold Fields, Transvaal	"
12.	"	"	Crocodile R., (E.) Transvaal	"
13-14.	Chert	"	Nel's River, Transvaal	"
15-17.	Sandstone	"	Cape Flats, near Cape Town.	Hottentot
18.	Dolerite	"	Pretorius Kloof, near Graaff Reinet	"
19.	Sandstone	"	Cape Flats	"
C 20-21.	Sandstone	"	Cape Flats, near Cape Town.	Hottentot.
22.	Dolerite	"	Lange Font., Camdeboo	"
23.	Sandstone	"	Cape Flats, near Cape Town	"
24.	"	"	Port Elizabeth, C.C.	"
25.	Dolerite	"	Buffels Kloof, Camdeboo	"
26.	Sandstone	"	Panmure, (E. London,) C.C.	"
27.	"	"	Berry Hoek, Stormberg	Bushman.
28.	Granite	"	Saldanha Bay, C.C.	Hottentot.
29.	Dolerite	"	Buffels Kloof, Camdeboo	"
30.	Sandstone	"	Bads Fontein, "	"
31.	"	"	Cape Flats, near Capetown	"
32.	Dolerite	"	Lange Fontein, Camdeboo	"
33.	Sandstone	"	Cape Flats	"
34.	"	"	Kruis, near Aberdeen, C.C.	"
35.	"	"	Stormberg, C.C.	Bushman.
36.	"	"	Alleman's Kraal, Aberdeen	Bush. or Hottentot.
37.	Dolerite	"	Kruis, Aberdeen	"
38.	Sandstone	"	Cape Flats	Hottentot.
39.	Dolerite	"	Cyfergat, Stormberg.	Bushman.
40.	Sandstone	"	Stormberg	"
41.	Dolerite	"	Pretorius Kloof, Graaff Reinet	Hottentot
42.	"	"	Swern Poort, Stormberg	Bushman.
43.	Sandstone	"	Plaate Drift, near Aberdeen	Hottentot.
44.	"	"	Kruis	"
45.	Dolerite	"	Stormberg	Bushman.
46.	Sandstone	"	Indwe	"
47.	Dolerite	"	Aliwal, N. C.C.	"
48.	"	"	Bushman Hoek, Stormberg	"
49.	"	"	Witte Kop, Stormberg	"
50-51.	Sandstone	"	Stormberg	"
52.	Dolerite	"	Palmiet Font., Camdeboo	Hottentot.
53.	Sandstone	"	Kruis, Aberdeen, C.C.	"
54.	"	"	Weltevreden, Stormberg	Bushman.
55.	"	"	Cape Flats	Hottentot.
56.	"	"	Kalk Bay, near Capetown	"
57.	"	"	Uitkyk, Stormberg	Bushman.
58.	"	"	Buffel's Kloof, Stormberg	"
59.	Limestone	"	Kimberley, C.C.	"
60.	Sandstone	"	Cyfer gat, Stormberg	"
61.	"	"	Stormberg	"
62.	"	"	Aliwal, N., C.C.	"
63.	"	"	Boshof, O. Free State	"
64.	"	"	Twee Font., near Burghersdorp, C.C.	"
65.	"	"	Stormberg	"
66.	Dolerite	"	Paarde Kral, Stormberg.	"
67.	Sandstone	"	Streef Font., "	"
68.	"	"	Indwe	"
69.	"	"	Cyfer gat, Stormberg	"
70.	"	"	Krans Kloof, Stormberg	"

AXES.

D 1.	Sandstone, from	Doorn Kop, Indwe, C.C.	Bushman
2.	"	Blyde R., Transvaal	"
3.	Chert	Kaap R., "	"
4.	Sandstone	Cape Flats	Hottentot.
5.	"	Komati R., Transvaal	Bushman.
6.	Quartz Rock	Kraai Font., Namaqualand.	Hottentot or Bushman.
7.	Jasper	Griquatown	"
8.	Sandstone	Oorlog's Poort, Stormberg	Bushman.
9.	Quartz Rock	Weltevreden, Stormberg.	Bushman.
10.	Sandstone	Kruis, Aberdeen.	Hottentot.
11.	Intrusive Rock	from Griquatown	Hottentot or Bushman.
12.	Sandstone	Maynard's Hoek, Camdeboo.	"
13.	"	De Platen, Camdeboo	"
14.	Jasper	Griquatown	"
15-16.	Sandstone	Cape Flats, near Capetown	Hottentot.
17.	"	Du Toits Pan, near Kimberley	Bushman or Hottentot.
18.	"	Junction between Queen's Town and Bushman Hoek	Bushman.
19.	"	Kruis, near Aberdeen	Hottentot or Bushman.
20.	"	Oaklands, Cape Flats	Hottentot.
21.	Jasper	Cyfergat, Stormberg	Bushman.
22.	Quartz Rock	Molteno	"
23.	Jasper	Cyfergat,	"
24.	Sandstone	Cape Flats	Hottentot.
25.	Jasper	Griquatown	Hottentot or Bushman.
26.	Sandstone	Cape Flats	Hottentot.
27.	"	Aberdeen	"
28.	"	Wynberg, near Capetown	"
29.	Amygdaloid	Kimberley, C. C.	Hottentot or Bushman.
30.	Quartz Rock	Cyfergat, Stormberg	Bushman.
31.	"	Stormberg	"
32.	Sandstone	"	"
33.	Jasper	Paarde Kraal, Stormberg	"
34.	Sandstone	"	"
35.	"	Brak Font., O. F. State	"
36.	Jasper	Owerwacht, Stormberg	"
37.	Sandstone	Aberdeen, C. C.	Hottentot or Bushman.
38.	"	E. of Middelburg, Transvaal	Bushman.
39.	"	Junction, Stormberg Road	"
40.	Quartz Rock	Knysna, C. Colony	Hottentot.
41.	Sandstone	Olifants Fontein, O. F. State	Bushman.
42.	"	E. of Middelburg, Transvaal	"

RUBBERS AND POLISHERS.

E 1.	Dolorite, from	Uitkyk Stormberg	"
2.	Sandstone	Weltevreden	"
3-5.	"	Stormberg	"
6.	"	Weltevreden, Stormberg	"
7.	"	Streef Font., "	"
8.	"	Burghersdorp, C. C.	"
9-10.	"	Stormberg	"

H 1.	Sandstone, from Little Crocodile R., Transvaal (Kaap)	Kafir.
2.	" " Boshof, O. F. State	Hottentot or Bush.
3.	Silicified Wood from Cyfergat, Stormberg	Bushman.
4.	Siliceous Rock " Onverwacht "	"
5.	Sandstone Indurated, from Doorn Kop, Indwe	"
6.	" " " Burghersdorp, C. C.	"
7.	" " " Cape Flats	Hottentot.
8.	Quartz Rock " Cyfergat, Stormberg	Bushman.
9.	Indurated Sandstone " Doorn Kop, Indwe	"
10.	" " " Streef Font, Stormberg	"
10A.	" " " Stormberg	"

11.	Indurated Sandstone from	Kapok Fontein, Stormberg	Bushman.
12.	"	"	"
13.	"	"	"
14.	"	"	"
15.	"	"	"
16-17.	"	"	"
18.	"	"	"
19.	"	"	"
20.	"	"	"
21.	"	"	"
22-23.	"	"	"
24.	"	"	"
25.	"	"	"
26.	Jasper	"	"
27.	Siliceous Rock	"	"
28.	Indurated Sandstone	"	"
29.	"	"	"
30.	"	"	"
31.	Siliceous Rock	"	"
32.	Indurated Sandstone	"	"
33.	"	"	"
34.	"	"	"
35.	"	"	"
36.	"	"	"
37.	"	"	"
38.	"	"	"
39.	"	"	"
40.	"	"	"
41-43.	"	"	"
44.	"	"	"
45.	"	"	"
46.	"	"	"
47.	"	"	"
48.	"	"	"
49.	"	"	"
50.	"	"	"
51.	Sandstone File,	"	"
52.	"	"	"
53.	"	"	"
54.	"	"	"
55.	"	"	"
56, 57.	"	"	"
58.	"	"	"
59.	"	"	"
60.	"	"	"
61.	"	"	"
62.	"	"	"
63-66.	Indurated Sandstone	"	"
67.	"	"	"
68-71.	"	"	"
72.	Siliceous Rock	"	"
73.	Indurated Sandstone	"	"
74-85.	"	"	"

FLAKES.

I 1.	Flake, from Paarde Kraal, Stormberg	Bushman.
2-4.	" " Stormberg	"
5.	" " Cyfergat, Stormberg.	"

6.	Flake, from	Stormberg	Bushman.
7.	"	Cyfergat, Stormberg.	"
8.	"	Cape Flats	Hottentot.
9.	"	Du Toits Pan	Bushman.
10.	"	Stormberg	"
11.	"	Du Toits Pan	"
12.	"	Tabak Poort, Stormberg	"
13.	"	Indwe River, C.C.	"
14.	"	Stormberg	"
15.	"	Mossel Bay	Hottentot.
16.	"	Indwe	Bushman.
17.	"	Cape Flats	Hottentot.
18.	"	Cyfergat, Stormberg.	Bushman.
19.	"	Kruis, Aberdeen	Hottentot.
20.	"	Stormberg	Bushman.
21.	"	Cyfergat, Stormberg.	"
22.	"	Paarde Kraal, Stormberg	"
23.	"	Kruis, Aberdeen	Hottentot.
24.	"	Tharfield, Pt. Alfred	"
25.	"	Kloppers Font., Stormberg	Bushman.
26, 27.	"	Stormberg	"
28.	"	Queenstown	"
29.	"	Buffels Kloof, Stormberg	"
30.	"	Cape Flats	Hottentot.
31.	Flake or Knife, from	Stormberg	Bushman.
32.	"	Poortje, Stormberg	"
33.	"	Stormberg	"
34.	"	E. of Middelburg, Transvaal.	"
35.	"	Stormberg	"
36.	"	Cape Flats	Hottentot.
37.	"	Cyfergat, Stormberg.	Bushman.
38.	"	Knysna	Hottentot.
39.	"	Buffel's Kloof, Camdeboo	"
40.	"	Tharfield, Pt. Alfred	"
41.	"	Kruis, Aberdeen	"
42, 43.	"	Cape Flats	"
44.	"	Mossel Bay	"
45.	"	Cape Flats	"
46.	"	Glen Connor, E. Rail	"
47.	"	Queenstown	Bushman.
48.	"	Indwe	"
49.	"	Queenstown	"
50, 51.	"	Stormberg	"
52.	"	Cyfergat, Stormberg	"
53.	"	Kloppis Font, Stormberg	"
54.	"	Jagersfontein, O. F. State.	"
55.	"	Queenstown	"
56.	"	Indwe	"
57, 58.	Flakes, &c., from	Griquatown	Hottentot or Bushman.
59.	"	Cyfergat, Stormberg.	Bushman.
60.	"	Kruis, Aberdeen	Hottentot.
61.	Flakes, &c., from	Cape Flats	Hottentot.
62.	"	Craddock	"
63.	"	Dordrecht	Bushman.
64.	"	Craddock	Hottentot.
65.	"	Cyfergat, Stormberg	Bushman.
66.	"	Cape Flats	"

SPEAR HEADS.

J	1.	Spear-heads, &c., from Aberdeen	Hottentot.
	2.	" " Weltevreden, Stormberg	Bushman.
	3.	" " Du Toit's Pan	"
	4.	" " Koffy Fontein, O. F. State	"
	5.	" " Paarde Kraal, Stormberg	"
	6.	" " Knyana	Hottentot.
	7.	" " Swaziland	Bushman.
	8.	" " Stormberg	"
	9.	" " Indwe	"
	10.	" " Cape Flats	Hottentot.
	11.	" " Cyfergat, Stormberg	Bushman.
	12.	" " Cape Flats	Hottentot.
	13.	" " Swaziland	Bushman.
	14.	" " Stormberg	"
	15.	" " Swaziland	"
	16.	" " "	"
	17.	" " Cyfergat, Stormberg	Bushman.
	18.	" " Indwe	"
	19.	" " Swaziland	"
	20-22.	" " Cape Flats	Hottentot.
	23.	" " Buffels Kloof, Stormberg	Bushman.
	24.	" " Aliwal, N.	"
	25.	" " Stormberg	"
	26-27.	" " Cape Flats	Hottentot.
	28.	" " Cyfergat, Stormberg	Bushman.
	29.	" " Stormberg	"
	30.	" " Tharfield, Pt. Alfred	Hottentot.
	31.	" " Cape Flats	"
	32.	" " Burghersdorp	Bushman.
	33.	" " Indwe	"
	34.	" " "	"
	35.	" " "	"
	36-37.	" " Cape Flats	Hottentot.
	38.	" " Kaap Valley, Transvaal	Bushman.
	39-41.	" " Cape Flats	Hottentot.
	42.	" " Stormberg	Bushman.
	43.	" " Cape Flats	Hottentot.
	44.	" " Kaap Valley, Transvaal	Bushman.
	45.	" " Cape Flats	Hottentot.
	46-47.	" " Tharfield, Pr. Alfred	"
	48.	" " Cape Flats	"
	49.	" " Kaap Valley, Transvaal	Bushman.
	50.	" " Stormberg	"
	51-52.	" " Cape Flats	Hottentot.
	53-56.	" " Cape Flats	"
	57.	" " Kaap Valley, Transvaal	Bushman.
	58.	" " Tharfield, Pt. Alfred	Hottentot.
	59.	" " Cape Flats	"
	60.	" " Kaap Valley, Transvaal	Bushman.
	61-62.	" " Cape Flats	Hottentot.
	63.	" " Stormberg	Bushman.
	64-111.	" " Cape Flats	Hottentot.
	112.	" " Kaap Valley, Transvaal	Bushman.
	113-114.	" " Cape Flats	Hottentot.

SCRAPERS.

K	1.	Scrapers from Twee Font., Burghersdorp	Bushman.
	2.	" " Buffel's Hoek, Camdeboo	Hottentot or Bush.

3.	Scrapers from	Oaklands, Cape Flats	Hottentot or Bush.
4-6.	"	Stormberg	Bushman.
7.	"	Cape Flats	Hottentot.
8.	"	Swaziland	Bushman.
9.	"	Stormberg	"
10.	"	"	"
11.	"	Buffel's Kloof, Stormberg	"
12.	"	Cape Flats	Hottentot.
13.	"	Queenstown	Bushman.
14.	"	Cyfergat, Stormberg	"
15.	"	Cradock	"
16.	"	Cape Flats	Hottentot.
17-18.	"	Kruis, Aberdeen	"
19.	"	Boshof, O. F. State	"
20.	"	Cradock	"
21-23.	"	Cape Flats	"
24.	"	Cradock	"
25.	"	Queenstown	"
26.	"	Molteno, Stormberg	Bushman.
27-29.	"	Stormberg	"
30.	"	Burghersdorp	"
31.	"	Cyfergat, Stormberg	"
32.	"	Port Elizabeth	Hottentot.
33.	"	Vreede, Camdeboo	"
34.	"	"	"
35.	"	Kormati R., Transvaal	Bushman.
36.	"	"	"
37.	"	Stormberg	"
38-39.	"	Queenstown	"
40.	"	Stormberg	"
41.	"	Cradock	"
42.	"	Cyfergat, Stormberg	"
43.	"	"	"
44.	"	"	"
45.	"	Cornedale, Aberdeen	Hottentot.
46-47.	"	Cradock	"
48-49.	"	Stormberg	Bushman.
50.	"	Cornedale	"
51.	"	"	"
52.	"	Cyfergat, Stormberg	Bushman.
53-54.	"	Queenstown	"
55.	"	Cyfergat, Stormberg	"
56.	"	Boshof, O. F. State	"
57.	"	"	"
58.	"	Queenstown	"
59.	"	Stormberg	"
60.	"	Koffy Font., O. F. State	"
61.	"	"	"
62-63.	"	Stormberg	"
64.	"	Boshof, O. F. State	"
65.	"	"	"
66.	"	Boshof, O. F. State	"
67.	"	"	"
68.	"	Indwe	"
69.	"	"	"
70.	"	Cyfergat, Stormberg	"
71.	"	Indwe	"
72.	"	Victoria, W.	"
73.	"	"	"

74.	Scrapers from Boshof, O. F. State	Bushman.
75.	" "	"
76.	" " Molteno	"
77.	" " Stormberg	"
78.	" " Aliwal, N.	"
79.	" " Cyfergat, Stormberg	"
80.	" "	"
81.	" " Stormberg	"
82-83.	" " Indwe	"
84.	" " Cyfergat, Stormberg.	Bushman.
85.	" " Stormberg	"
86.	" " Kruis, Aberdeen	Hottentot or Bush.
87.	" " Koffy Font., O.F. State.	Bushman.
88-89.	" " Kruis, Aberdeen	Hottentot or Bush.
90.	" " Queenstown.	Bushman.
91.	" " Cyfergat, Stormberg.	"
92.	" " Burghersdorp	"
93.	" " Koffy Font., O.F. State.	"
94.	" " Cyfergat, Stormberg.	"
95-96.	" " Modder R., O.F. State	"
97.	" " Kruis, Aberdeen.	Bush. or Hottentot.
98.	" " Cyfergat, Stormberg.	Bushman.
99-101.	" " Aliwal N.	"
102.	" " Indwe.	"
103.	" " Cyfergat, Stormberg.	"
104.	" " Stormberg	"
105.	" " Kruis, Aberdeen	"
106.	" " Stormberg	"
107.	" " Owerwacht, Stormberg	"
108.	" " Stormberg	"
108a.	" " Kruis, Aberdeen	"
109.	" " Jagersfontein, O.F. State.	"
110.	" " Boshof, O.F. State	"
111.	" " Stormberg	"
112.	" " Kruis, Aberdeen	"
113-114.	" " Bushman Hock, Stormberg.	"
115.	" " Cape Flats	Hottentot.
116.	" " Oaklands C. Flats.	"
117.	" " Stormberg	Bushman.
118-120.	" " Cyfergat, Stormberg.	"
121.	" " Cradock	"
122-124.	" " Stormberg	"
125.	" " Cradock	"
126.	" " Queenstown.	"
127.	" " Cyfergat, Stormberg.	"
128-129.	" " Aliwal North	"
130.	" " Burgersdorp.	"
131.	" " Cyfergat, Stormberg.	"
132.	" " Boshof, O.F. State	"
133.	" " Burghersdorp	"
134.	" " Stormberg	"
135.	" " Cyfergat, Stormberg.	"
136.	" " Aliwal, N.	"
137-138.	" " Burghersdorp	"
139.	" " Indwe	"
140.	" " Kruis, Aberdeen.	"
141.	" " Kaap Valley, Transvaal.	"
	" " Aliwal N.	"
	" " Kruis, Aberdeen.	"

144-146.	Scraper from Aliwal N.	Bushman.
147-148.	„ „ Cape Flats	Hottentot.
149.	„ „ Komati R., Swaziland	Bushman.
150-151.	„ „ Aliwal N.	„
152-153.	„ „ Jagersfontein, O.F.S.	„
154.	„ „ Queenstown.	„
155-157.	„ „ New Christiana, Transvaal.	„
158-159.	„ „ Stormberg	„
160-162.	„ „ Aliwal N.	„
163.	„ „ Cape Flats	Hottentot.
164-165.	„ „ Cradock	Bushman.
166.	„ „ Aliwal N.	Bushman.
167.	„ „ Uitkyk, Stormberg	„
168.	„ „ Cradock	„
169.	„ „	„
170.	„ „ Indwe.	„
171.	„ „ Cyfergat, Stormberg	„
172.	„ „	„
173-175.	„ „ Kalk Bay	Hottentot.
176, 177.	„ „ Aberdeen Road.	Bushman.
178.	„ „ Kruis, Aberdeen	„
179.	„ „ Kalk Bay	„
180.	„ „ Aberdeen Road.	„
181.	„ „ Kruis, Aberdeen	„
182-189.	„ „ Aberdeen Road.	„
190.	„ „ Kruis, Aberdeen	„
191-193.	„ „ Aliwal N.	„
194.	„ „ Aberdeen Rd.	„
195.	„ „ Aliwal N.	„
196.	„ „ Kruis, Aberdeen	„
197.	„ „	„
198.	„ „ Kalk Bay	„
199-201.	„ „ Aberdeen Road.	„
202.	„ „ Cradock	„
203.	„ „ Indwe.	„
204.	„ „ Aberdeen Rd.	„
205.	„ „ Indwe.	„
206.	„ „ Aberdeen Rd.	„
207.	„ „ Boshof, O.F. State	„
208.	„ „	„
209.	„ „ Aliwal, N.	„
210.	„ „	„
211.	„ „ Cape Flats	Hottentot.
212.	„ „	„
213.	„ „ Aberdeen Rd. (P)	Bushman.
214.	„ „ Indwe.	„
215.	„ „ Boshof	„
216.	„ „ Burghersdorp	„
217.	Worn Scrapers, from Kimberley.	„
218.	„ „ Kruis, Aberdeen.	„
219.	„ „ Buffels Kloof.	„
220.	„ „ Stormberg.	„
221.	„ „ Uitkyk, Stormberg	„
222.	„ „	„
223.	„ „ Stormberg.	„
224.	„ „ Kruis, Aberdeen.	„
225.	„ „ Burghersdorp	„
226.	„ „ Twee Font, Burghersdorp	„
227.	„ „ Aliwal, N.	„

SAWS.

L 1.	Saws, from Stormberg		
2-4.	" " Cape Flats		Hottentot.
5.	" " Transvaal.		"
6.	" "		
7.	" " Stormberg		"
8.	" " Cape Flats		"
9.	" " Tharfield, Pt. Alfred		"
10.	" "		

SPOKESHAVES.

M 1-2.	Spokeshaves, from Kruis, Aberdeen		Bushman.
3.	" " Queenstown		"
4.	" " "		
5.	" " Cape Flats		Hottentot.
6.	" " Boshof, O. F. State		Bushman.
7.	" " Queenstown		"
8.	" " Paarde Kraal, Stormberg		"
9.	" " Cyfergat, Stormberg		"
10.	" " Kaap Valley, Transvaal		"
11.	" " Aberdeen Road		"
12.	" " Stormberg		"
13.	" " Kruis, Aberdeen		"
14.	" " Burghersdorp		"
15.	" "		
16.	" " Cape Flats		Hottentot.
17.	" " Boshof, O. F. S.		Bushman.
18.	" " Onverwacht, Stormberg		"
19.	" " Cyfergat, Stormberg		"
20.	" "		
21.	" " Swaziland.		"
22.	" " Cyfergat, Stormberg		"

SMALL DRILLS (for drilling eggshells)

N 1-5.	Small drills from Aberdeen Road		Bushman.
6.	" " New Christiana, Transvaal		"
7.	" " Aberdeen Road		"
8.	" " Kruis, Aberdeen		"
9.	" " Cape Flats		Hottentot.
10.	" " Aberdeen		Bushman.
11.	" " Cradock		"

GROOVED STONES (for straightening arrow-shafts).

O 1.	Grooved Stones from Paarde Kraal, Stormberg		Bushman.
2.	" " Boshof, O. F. State		"
3-4.	" " Stormberg		"
5.	" " Vreede, Camdeboo		"
6.	" " Krui Font., Aberdeen		"
7.	" " Stormberg		"
8.	" " Leeuwe Font., Stormberg		"
9.	" " Pretorius Kraal, Graaf Reinet		"
10.	" (for sharpen- ing bone arrow-points), from Streef Font., Stormberg		"
11.	" " O. Free State		"
P 1-5.	Bushman, Painting, from Stormberg		"

POTTERY.

Q 1-2.	Pottery, from Kaap Valley, Transvaal.		Kafirs exterminated by Moselikate.
3-5.	" " Kruis, Aberdeen		Hottentot.

- 6-7. Pottery from Port Nolloth Bushman.
 8-19. " " Kruis "
 20-40. " " Stormberg Bushman.
 R 1. Palette, from Lange Fontein, Camdeboo "
 2-10. Colours used for Rock painting, from Stormberg "
 S 1. Card illustrating the Method in which Eggshell Beads were made by Bushmen.
 2. Photograph showing the Manner in which the Perforated Stones are used by Bushmen.
 Stinkwood Cabinet, with eight trays.

11. Kimberley Local Committee.

Bushman Carvings. Representations of Animals, chipped in the surface of greenstone boulders, taken from a kopje about 10 miles from Kimberley, as follows:—Zebra, Ostrich, Elephant, Rhinoceros, Hippopotamus, Hartebeeste, Crane, Bull.

12. Lovedale Missionary Institute ALICE.

The articles comprised in this exhibit, described as made by the natives, are sufficiently distinguished from those made by Europeans. In all cases, the work has been done under European supervision, but where vouched for as Native work, it may be really accepted as such, even to the imperfect polish on some of the articles of furniture. This is a kind of work in which Native apprentices have not much practice. It may be asked why Native workmen do not afterwards produce work of the same quality, and of their own accord. The reply to that is, that as yet, European direction seems a necessity as to design, accuracy of measurement, and finish.

1. House and School Furniture, made by Natives under European supervision.
 Schoolmaster's Desk, Double Drawer Table, Bookstand, Cupboard for Books.
2. Specimens of Wood Turning.
3. Wheelbarrows, made by Native apprentices under European supervision.
4. Printing. Case work (composing, correcting, &c.), chiefly by Natives. Presswork, or printing-off, by Europeans.
5. Bookbinding. (a) Entirely of Native work; (b) Native forwarding or preparation, European finishing; (c) European work.

13. Stamford, Walter. GRIQUALAND EAST. An Abakweta Dress.

14. Webb, Clement Davies QUEENSTOWN.

A 1-70. Collection of Horns of the South African Antelopes and other Animals.

(See under *Animal Products*.)

Collection of Articles of Native Workmanship.

- B 1-65. Collection of Native-made Sticks, comprising sixty-four different kinds, made by the Baputi, Basuti, Fingoe, Pondo, Gaika, Gceleka, and Tembu.

- C 1-21. Native Pipes, made by the various tribes of the Colony.
- D 1-57. Miscellaneous Objects, chiefly illustrative of the Natural History of the Colony, Bushman Paintings, &c.
- E. I. 1. Witch Doctor's Dress, complete; worn by the male Witch Doctors of the Kafirs and Fingoes, consisting of a head-dress, four kinds of necklets, ivory armlets, strips of wild catakin round the forearm, tippet made of the skin of the Roo de Ree-bok hanging to the waist, kilt of various skins, and armlet of bead worked in skin.
2. Abakweta Dress, worn by young men during the circumcision rites. The dress is composed of a kilt of the leaves of the wild date, strips of skins round the arms, a band of threaded black beads to go round each shoulder, head-dress of young leaves of the date palm with a veil of fine grass, and other small ornaments sometimes worn.
3. Teebat or Dancing Dress, worn by the wives of the richest men on special dancing occasions. This dress is made from the hide of an ox, having ornaments of brass buttons and chains covering it, beads also being sometimes introduced.
- II. 1-24. Kafir Ornaments, consisting of shoulder ornaments, head-dresses, armlets, anklets, bags, coverings, girdles, belts, necklets of various kinds, and all bead-work ornaments in common use among the Kafirs.
- III. 1-47. Fingoe, Basuti and Baputi Ornaments and Dress.
- F: 1-50. Miscellaneous Articles of Native workmanship, including snuff-boxes made by natives of various tribes, Basuto hats and baskets, Fingoe baskets, mats and brooms, milk calabashes, drinking cups made of horn and gourd, brooches made of wire, musical instruments made by the Basutos and Amagaika, powder flasks of horn, spoons made of wood, bone, horn, and grass, knives, plates, earthenware pots and water bottles, bangles of tin, wire, &c.
- G. 1-20. Native weapons, including assegais, axes, arrows, shields, &c.

15. Lewis, H. DAMARALAND.

Native Weapons.

- (1.) Seven quivers of poisoned arrows (2.) Six bows. (3.) Tiger skin; karrosses of tiger and goat skins.

MALAY DEPARTMENT.

16. Cape Commission.

Wicker and Basketwork by Malays.

This industry is carried on in the Exhibition by a family consisting of four Malays.

ANIMAL PRODUCTS.

STUFFED SPECIMENS, ANIMAL PRODUCTS, AND ARTICLES PREPARED THEREFROM.

STUFFED ANIMALS, HORNS, SKINS, HIDES, LEATHER.

18. Cape Commission.

- (1) Group of Sheep, Goats, and Ostriches, arranged on a sample of the soil and with herbage on which they subsist. The Group consists of the following specimens:—

Fat-tailed Cape Sheep, with Lamb.

Presented by the Hon. J. A. Combrinck, M.L.C., Capetown.

Cape Goat (Kapata).

Presented by D. G. de Villiers, Beaufort West.

This goat, when alive, weighed 200 lbs.

Angora Goats, ram and ewe.

Bred and presented by Frank Holland, Haddon, Bedford District.
who contributes the following note:—

The ram and ewe (16 months old) are fair representatives of a flock of 1,500. The original flock consisted, about 25 years ago, of the common goats of the country (*Copia Hircus*), but have since been crossed, first with rams imported from Asia Minor, and afterwards by rams from the breeder's pure-bred flock. I call them the improved Angora, as the fleeces of this flock average about 5 lbs. of clean mohair per annum, of as much value per lb. as the best Turkish mohair, whereas the best flocks in Turkey only yield about 2½ lbs. per goat per annum. The kid is not quite so well bred, but is a fair sample of the rest of my flocks.

The fleece on the goats is what is generally called winter hair, they having been shorn in June (the two large goats), and is not nearly so good as the summer clip, which would be fit to shear in July next.—F.H.

Ostriches.

Male and female, full grown.

Two Ostriches six months old.

Six Ostriches one month old.

- (2) Antelopes' Heads and Horns, complete, as follows:—

Bushbuck, Rietbuck (2), Tsessibe, Sable Antelope (3), Blue Wildebeest, Waterbuck.

Antelopes' Horns.

Sable Antelope (3 pairs), Koodoo (2 pairs), Waterbuck, Eland, Gembock (4 pairs).

Giraffe's Head and Tail.

Lion Skull, Yellow Mane Lion.

(4) Skins of the following Animals:—

Bluebuck, Ratel, Red Cat Jackal, Meer Cat, Wild Cat, Antbear, Leopard.

(5) Tortoise Shell.

19. Baker, Bowes and Co. **CAPETOWN.**
Bullocks Heads and Horns.

21. Dunn, E. J. **CAPE COLONY.**
Collection of Horns of Cape Antelopes and other Animals.

12. 1-2, Bluebok, male and female; 3-4, Roodebok, m. and f.; 5, New Antelope; 6, Duiker, (Cape Colony.) m.; 7, Duiker, (Transvaal.) m.; 8, Oribe, m, 9, Steinbok, m; 10, Grysok, m; 11, Klipspringer, m; 12, Vaal Rheeboek, m; 13, Rooi Rheeboek, m; 14, Bushbok, m; 15, Rietbok, m; 16-17, Springbok, m. and f; 18-19, Blesbok, m. and f; 20-21, Bontebok, m. and f.; 22, Rooibok, m.; 23-24, Rooi Hartebeeste, m. and f.; 25, Lichtensteins Hartebeeste, m.; 26-27, Sassabye, m. and f.; 28, Luchwe, m.; 29-30, Blue Wilderbeeste, m. and f.; 31-32, Swart Wilderbeeste, m. and f.; 33-34, Buffalo, m. and f.; 35-36, Gemsbok, m. and f.; 37-38, Sable Antelope, m. and f.; 39, Inyala, m.; 40-41, Roan Antelope, m. and f.; 42, Water Buck, m.; 43, Koodoo, m.; 44-45, Eland, m. and f.; 46, Giraffe, m.; 47-49, White Rhinoceros, m.; 50, Black Rhinoceros; 51-52, Lake N'Gami ox and cow; 53, Ox horns, Bamangwath.

22. Hockin, E. **PORT ELIZABETH.**
Buffalo Head and Horns.

23. Marshall, A. **PORT ELIZABETH.**
Bullock's Head and Horns.
Bush Buck's Head and Horns.

24. Petrie, T. **PORT ELIZABETH.**
Horns as follows:—

Springbok (4 pairs); Bushbok (11 pairs); Rietbok; Hartebeeste (6 pairs); Koodoo (4 pairs); Eland; Gemsbok (4 pairs); Buffalo; Sjamboks (12).

25. Webb, Clement Davies **QUEENSTOWN.**
Collection of Horns of South African Antelopes and other animals.

A. 1-4, Koodoo (*Strepsiceros Kudu*); 5-8, Buffalo (*Bos bubalus*); 9-11, Gemsbok (*Oryx gazella*); 12, White Rhinoceros; 12a-14, Roan Antelope (*Hippotragus leucophaeus*); 15-16, Sable Antelope (*Hippotragus niger*); 17-19, Hartebeest (*Alcephalus caama*); 20-21, Bastard Hartebeest (*Alcelaphus lunatus*); 22, Water Buck (*Kobus ellipsiprymnus*); 23-26, Black Wild Beast (*Catoblepas gnu*); 27-28, Blue Wild Beast (*Catoblepas gorgon*); 29-35, Bush Buck (*Tragelaphus sylvaticus*); 36, Rood Ree Bok or Rhoode Rhee Bok; 37-37a, Vaal Rheeboek; 38-39, Reed Buck; 40-44, Eland (*Oreos canna*); 45-49, Spring Buck (*Gazella Eucore*); 50-52, Bonte Bok *Gazella pygarga*; 53-58, Bles Bok (*Gazella albifrons*); 59-61, Impala or Palah (*Epyceros melampus*); 62-62a, Stein Bok (*Nanotragus*

tragulus); 63-66, Duiker (*Cephalophus mergens*); 67, Blue Buck; 68, Oribi (*Nanotragus scoparius*); 69, Cape Sheep (*Four horned*); 70, Cape Ram.

26. Combrinck & Co. CAPETOWN.

Sheep and Goat Skins.

27. Prince Vintcent & Co. MOSSEL BAY.

Goatskins, from the District of Oudtshoorn.

28. Van der Byl & Co. CAPETOWN.

Cape Sheep Skins (12).

Goat Skins (12).

Merino Skins (12).

29. Spence and De Pass CAPETOWN AND LONDON.

(1.) Fur Seal Skins.

a. Dressed with the hair on. *b.* Dressed, but not dyed. *c.* Dressed and dyed. The seals are caught on the rocks and islets off the South-west coast.

(2.) Seal Oil, made from the blubber.

(3.) Shark Oil.

See also Exhibit of Guano, &c.

30. Wilman, Spilhaus & Co. CAPETOWN.

Sealskins (12), from seals caught on Cape shores.

See also Exhibit of Guano.

31. Cape Commission.

Collection of Colonial Leather, dressed by Mossop and Garland, Capetown.

Brown Alum Leather.

White " "

Brown Harness Leather.

Stained " "

Black " "

Black Strap Leather.

Wax Kip Butts.

" " Sides.

Russet Army Kip.

Waxed Calf.

Black Diamond Grain Kip.

Black Polished " "

Dull Grain Kip.

Round " "

Waxed Splits.

Satin Calf.

Black Waxed Goat.

Black Grained Goat.

Levant Goat.

Satin Kip.

White Buffed Kip.

Russet Long Grain Kip.

Russet Round Kip.

White Buffed Goat.

Polished Grain "

Russet Splits.

" Goat.

Stained "

Cape Bookbinders' Leather.

Large Grain Russet Goat.

Bag Hide, Smooth Grain.

" Buffed "

" Russet "

" Stained Grain.

" Round "

" Long Grained Black.

" Satin.

Butt, Sole.

Cape Sheep, Basils.

Merino, Basils.

32. Du Toit, A. C. PAARL.

One Set of Harness, tanned at the Paarl.

35. Cape Commission.

Collection of Cape Wools from various Districts.

(1.) From Bredasdorp District :—

Wool, 145 lbs., superior fleece-washed, from Cape-bred animals. Grown at Zeekoe Valley, Bredasdorp, on grassland, unenclosed, 2,000 acres supporting 800 sheep, and Cooper's Dip being employed. The average annual yield per animal, when washed, is $3\frac{1}{4}$ lbs. Clipped in October, 1885.

Wool, 123 lbs. superior grease, from Cape animals. Grown at Fairfield, Bredasdorp, on grasslands, unenclosed. The number of sheep in each flock varies from 600 to 800. Cooper's Dip is used. The average annual yield per animal is $3\frac{1}{4}$ lbs. Clipped in October, 1885.

(2.) From Caledon Division :—

Wool (a) 102 lbs. grease, from Cape animals.

(b) 103 lbs. fleece-washed, from ditto. Grown in the Division of Caledon, on grasslands 4,000 acres in extent, unenclosed. The average number of the flock is 2,000. Cooper's Dipping Powders are used. The average annual yield per animal, when washed, is $2\frac{1}{2}$ lbs. Clipped in October, 1885. Exhibited to show excellence of wool grown in the Caledon Division.

(3.) From Riversdale Division :—

Wool, 107 lbs. grease, from Cape animals. Grown at Klipdrift, in the Division of Riversdale, on grasslands 6,000 acres in extent, unenclosed. The average number of the flock is 1,600. Tobacco dip is used, and the annual average yield per animal is 5 lbs. in the grease. Clipped in October, 1885.

Wool, 104 lbs. fleece-washed, from Cape animals. Grown at Wegwyzers River, in the Division of Riversdale, on mountain and grassland 1,050 acres in extent, unenclosed. The average number of the flock is 400. Tobacco dip is used, and the annual yield per animal is $2\frac{1}{4}$ lbs. when washed. Clipped in October, 1885. Exhibited to show excellence of wool grown in Riversdale Division.

(4.) From Swellendam Division :—

Wool, 100 lbs. grease, from Cape animals. Grown at Lismore, in the Division of Swellendam, on grassland 1,200 acres in extent, unenclosed. The average number of the flock is 800. Tobacco dip is used, and the average annual yield per animal is 4 lbs. in grease. Clipped in October, 1884.

Wool, 100 lbs. fleece-washed, from Cape animals. Grown at Sand Kraal, in the Division of Swellendam, on grassland in extent 6,000 acres, partly enclosed. The average number of the flock is 800. Little's Dip is used, and the annual yield per animal is 4 lbs. in grease. Clipped in November, 1884.

36. Booysen, G. J. N. PATRY'S FONTEIN, RICHMOND.

Wool, 114 lbs. grease, of a stock originally imported.

Grown at Patry's Fontein, in the division of Richmond, on Karoo land, area 6,400 acres, unenclosed. There are 2,000 sheep on the farm, the average number in a flock being 100. Little's Chemical Fluid is used,

and the average annual yield per animal is 12 lbs. in grease. Nine months growth; clipped in September, 1885. Exhibited for length, fastness, and fineness of quality.

37. Breda, Halkett and Co. **CAPETOWN.**

Wool, one bale, snow-white, scoured at Waverley Mills.

From Colonial Sheep, bred by C. G. Mulder, at Williston, Karoo pasturage: tobacco dip.

38. De Jager, H. J. **KUILS POORT, BEAUFORT WEST.**

Cape Wool, 150 lbs.

Grown at Kuils Poort, on mountain and Karoo lands 50,000 acres in extent, unenclosed. The average number of the flock is 1,000. Tobacco dip is used, and the average annual yield per animal is 6 lbs. in the grease. Clipped in November, 1884.

39. Despatch Wool Washing Co. **ZWARTKOPS RIVER, NEAR**
PORT ELIZABETH.

Wool, washed.

40. Elliott, William Thomas, **NELS POORT, BEAUFORT WEST.**

Wool, 100 lbs. grease, from Colonial-bred wethers.

100 lbs. grease, from Colonial-bred ewes.

Grown at Nels poort, in the Division of Beaufort West, on Karoo lands 60,000 acres in extent, unenclosed. The average number of each flock is 1,200. Cooper's Dip is used, and the average annual yield per animal is 8½ lbs. Twelvemonth's growth. Clipped in October, 1885. Exhibited with a view to ascertaining the market value of the wool, which is a fair sample of the wool produced in that part of the Colony.

41. Frater and Mossop. **PAARL.**

Wool 120 lbs. washed. Exhibited to show excellence of washing.

42. Gubb, T. W. **UITENHAGE.**

Wool, 2 bales, 128 lbs. and 123 lbs. snow-white. Scoured by Exhibitor.

43. Hart, W. A. **HARTFIELD, CATHCART.**

Wool, 105 lbs., from Colonial-bred sheep.

Grown at Hartfield, in the Division of Cathcart, on grasslands 15,000 acres in extent, enclosed. The average number of sheep in flock is 7,000. Tobacco dip is used, and the annual average yield per animal is 8 lbs. 1 oz. in grease. Twelvemonth's growth. Clipped 15 November, 1885. The sheep in this flock have been bred for the last fifteen years from the celebrated Ercildoune flock, the property of Sir S. Wilson. First Prize Port Elizabeth Exhibition, 1885.

44. Irvine, John J., **WATERFORD, NEAR KING WILLIAM'S TOWN.**

Wool, from Cape-bred merino sheep: (a) 100 lbs. fine grease;

(*b*) 100 lbs. fine-washed—washed on sheep's back ; (*c*) 100 lbs. scoured—scoured at Waterford.

Grown at Waterford, in British Kaffraria, on grasslands 12,000 acres in extent, enclosed. The average number of the flock is 600. Tobacco dip is used, and the average annual yield per animal is 7 lbs. in the grease. Clipped in December, 1885. This wool is exhibited as a specimen of medium quality, sound, full-stapled combing-wool, such as can be produced throughout the country districts.

45. Jackson, Clifford VICTORIA WEST.

Wool, 35 fleeces, 221 lbs., grease, from Merino ewes, by Cape-born rams the progeny of imported rams.

Grown on the farm of Mr. Sidney Jackson, at Victoria West, on Mountain Karoo and stony land, 19,000 acres in extent, unenclosed. The average number of the flock is 1,000, tobacco dip is used, and the average annual yield per animal, heavily skirted, is 6 lbs. in the grease. Twelve months' growth, dipped in November, 1885. Exhibited to show excellence of quality.

46. Jackson, H. A. LEWISVILLE, BEAUFORT WEST.

Wool, 100 lbs., fine grease Merino, from Cape animals.

Grown in the district of Beaufort West, on Karoo and mountain lands, 26,000 acres in extent, unenclosed. The average number of the flock is 5,000, and Cooper's Powder is used. Twelve months' growth, clipped in October, 1885.

47. Joubert, P. J. EENZAMHEID, COLESBERG.

Wool, 100 lbs., grease, from Merino sheep.

Original stock, Saxon Merino, since crossed with Rambouillet and Australian. Grown in the district of Colesberg, on Karoo and grass land, 10,000 acres in extent, enclosed. The average number of the flock is 2,000, Little's Chemical Dip is used, and the average annual yield, per animal, is 10 lbs. Dipped in March, 1885. Exhibited as a fairly good sample of long grown Cape Merino in grease.

48. Kemp, J.

Wool, 3 bales, grease ; (*a*) from Colonial-bred grass-fed wethers, by imported Merino rams ; (*b*) 12 month's growth, from Colonial-bred maiden ewes, by imported rams ; (*c*) 12 month's growth from Colonial-bred lambs, by imported Merino rams.

49. King, Geo. & Sons ELIZABETH FARM, BEDFORD.

Wool, 100 lbs., grease, from maiden ewes, from Colonial-bred Merinos. Bred by exhibitor.

Grown on grass land 600 acres in extent, enclosed. The average number of sheep in flock is 400, and the annual average yield per animal is 10 lbs. The sample is of 14 months' growth.

50. Moorcroft, James S. . . DROOGE FONTEIN, WODEHOUSE.

Wool, 1 bale, grease, from the progeny of imported Merinos.

Grown at Drooge Fontein, on grass land 6,000 acres in extent, partly enclosed. The average number of the flock is 800, McDougal's Dip is employed, and the average yield, per animal, is $7\frac{1}{2}$ lbs. in grease. Clipped in November.

51. Murray, Geo. B. KLIP KOP, COLESBERG.

Wool, 100 lbs. Cape Merino.

Grown in the Colesberg District, on Karoo lands, 16,000 acres in extent, unenclosed. The average number of sheep in the flock is 4500; a chemical dip is used, and the annual average yield, per animal, is 5 lbs. 6 oz. in grease. Clipped in October, 1885. Exhibited for fineness of quality and length of staple. No scab in flock, and sheep in and in for the past 12 years.

52. Murray, John J. GROOT HALF AKKER, COLESBERG.

Wool, 100 lbs. fine Merino grease, from a flock in-bred from pure Merinos for the past 17 years.

Grown in the District of Colesberg, on Karoo lands, 12,000 acres in extent, unenclosed. The average number in the flock is 2,000. Little's chemical dip is used, and the average annual yield, per animal, is about 8 lbs. in grease. Twelve months' growth. Clipped October, 1885. Exhibited as an average sample of long-grown Cape merino grease.

53. O'Connor, John.

Scoured Wool, 150 lbs.

54. Rorich, Paul, C. GROOT ZEEKOEKAT, MOLTENO.

Wool, lambs, 160 lbs. grease, from cross-bred Australian and Rambouillet.

Grown in Molteno District, on mountain lands. Twelve months' growth.

55. Rose, Peter D. KLAVERFONTEIN, BEAUFORT WEST.

Cape Wool, 100 lbs.

Grown at Klaverfontein, on mountain land, 16,000 acres in extent, unenclosed. The average number of the flock is 1000. Sulphur dip is used, and the average annual yield, per animal, is 8 lbs. in the grease. Clipped in November, 1884.

56. Rubidge, Richard. WELLWOOD, GRAAFF REINET.

Wool, 100 lbs. grease, from Colonial-bred Merino wethers.

Grown at Wellwood, Sneeuwberg, in the Division of Graaff Reinnet, on mountain land, in area 2,400 acres, unenclosed. The average number of the flock is 1,100. The dip used is tobacco, except after shearing, when sulphur is *sometimes* employed, and the average annual yield, per animal, including lambs, is $7\frac{1}{2}$ lbs. in grease. Twelve months' growth. Clipped in October.

Wool, 100 lbs. grease, from Colonial-bred Merino ewes.

Grown at Wellwood, in the Division of Graaff Reinet, on Karoo lands; 4,000 acres in extent, partly enclosed. The average number of sheep in the flock is 1,000. Tobacco dip is used, except just after shearing when sulphur is substituted, and the annual average yield per animal, including lambs, is 7½ lbs. Twelve months' growth. Clipped in October. Both the above wools are exhibited in order to ascertain their market value.

57. Savage and Hill. **PORT ELIZABETH.**

- (1.) Wool, grease 54 lbs. From the Graaff Reinet District.
- (2.) Goods manufactured from Cape wools.
- (3.) Mohair.

58. Springfield Wool Washing Co. **UITENHAGE.**

Wool, samples of washed wool.

59. Union Wool Washing Works. **UITENHAGE.**

Wool, samples of washed wool.

60. Vermaak, J. A. **ZUURFONTEIN, BURGHERSDORP.**

Wool, 3 samples.

(a) Part of fleece from imported Australian ram, pure Spanish merino, over 13 months growth; (b) Two fleeces, Colonial bred, 19 months growth, last shorn March 20, 1884, clipped November 10, 1885; (c) Nine fleeces, Colonial bred, 7 months growth, last shorn March 20, 1885, clipped November 10, 1885.

Grown at Zuurfontein, on grass lands 8,000 acres in extent, enclosed. The average of the flock is 3,000, Cooper's Dip is used, and the average annual yield per animal is over 10 lbs.

61. Waverley Wool Washing Company, CERES ROAD, TULBAGH DISTRICT.

Wool, 100 lbs. Cape. Exhibited to show excellence of scouring.

62. Weeber Bros. **ELANDSFONTEIN, BEAUFORT WEST.**

Wool, 100 lbs. Cape

Grown at Elandsfontein, on Karoo lands, in extent 40,000 acres, unenclosed. The average number of this flock is 1,200, tobacco dip is used, and the average annual yield per animal is 6 lbs. in the grease.

63. Wienand, F. F. **BEDFORD.**

Wool, 100 lbs. grease, from Colonial bred sheep.

64. Wilman, Spilhaus and Co. **CAPETOWN.**

Wool. A representative collection of the Wools of the Western portion of the Cape Colony.

65. Cape Commission.

Model of Wool-washing Machine. Made at the Government Railway Workshops, Uitenhage.

MOHAIR.**68. Edwards, Jos. BEDFORD.**

Angora Hair, 100 lbs., from Colonial bred Goats.

69. Edwards, Walter James, KLIPFONTEIN, GRAAFF-REINET.

Mohair, Kids' Hair, 50 lbs., from rams imported by J. B. Evans and Colonial cross-bred selected ewes.

Grown at Klipfontein, on Karoo land, 27,000 acres in extent, enclosed. There are three flocks of 1,000 each, Little's Fluid is used, and the average annual yield per animal is 5½ lbs. for Kapaters and ewes, and for kids 2 lbs. 14 ozs. Nine months growth; clipped in August, annually. The nature of the pasturage has caused the dull appearance, but the sample is fine without kemp, and for kids of nine months old a fair length.

70. Hall, John PORT ELIZABETH.

Mohair.

71. Holland, Frank . . . HADDON, DIVISION OF BEDFORD.

Mohair, various samples.

The samples marked (1) are from a clip already disposed of.

Sample (2) is the entire fleece of a full mouthed goat ewe, between 7 and 8 months growth, weighing over 7 lbs., and is exhibited to show the possibility of an old goat giving a fleece combining weight and quality. Sample (3) is winter hair exhibited to show how short it is.

Grown at Haddon, on grass lands, interspersed with Karoo country and groves of mimosa trees, 5,000 acres in extent, nearly surrounded by a river (usually running), the whole enclosed and subdivided. The average number of a flock is 750, and there are four flocks, besides a large herd of short-horn cattle. Clipped in June and July, the winter hair in October, and the average weight, including kids' hair, is over 4 lbs. Exhibited to show the state of perfection to which Angora hair can be brought in the Colony.

72. O'Connor, John PORT ELIZABETH.

Mohair, one bale.

See also under Wool.

73. Pretorius, Gert.

Colonial Angora Ram's Hair, two fleeces.

74. Rex, John George Duthie . . . MABUS, KLIPPLAAT.

(1.) A Series of Samples of different kinds of Mohair:—

Mohair, No. 1 Z, 5 lbs., from Aberdeen ewe, aged, imported by J. B. Evans.

No. 13 Z, 7 lbs. 3 ozs., Ewe, Colonial, thoroughbred, "full mouth," bred

by Exhibitor out of thoroughbred ewe and ram imported by J. B. Evans.

No. 1 Z, 4 lbs. 11 oz., Ram, Colonial, thoroughbred, out of Exhibitor's thoroughbred ewe by ram of same breed, imported by J. B. Evans.

No. 2 Z, 5 lbs. 9 oz., Ram, Colonial, thoroughbred, by ram imported by Evan's, out of Exhibitor's ewe.

No. 48, 4 lbs. 10 oz., Ewe, Colonial, thoroughbred, out of thoroughbred ewe, and ram imported by J. B. Evans.

No. 56, 5 lbs. 9 oz., Ewe, thoroughbred, out of Exhibitor's thoroughbred ewe, by ram imported by J. B. Evans.

No. 18, 3 lbs. 8 oz., No. 3, 3 lbs. 6 oz., No. 22, 3 lbs. 12 oz., Kids, all thoroughbred, from Exhibitor's thoroughbred ewes by rams imported by J. B. Evans.

No. 3 C, 3 lbs. 8 oz., and No. 20 C, 4 lbs. 13 oz., Colonial cross-bred, out of Exhibitor's cross-bred ewes, by rams imported by J. B. Evans.

Exhibitor's imported Ram "Sultan" was purchased in March, 1880, at Graaff Reinet, for a sum of £120 sterling. It was one of a lot personally selected by J. B. Evans in Turkey, and was carried for many miles across country on mules. Exhibitor has had many good kids by this ram, which died in June, 1885. The whole of this Mohair was grown at Mabus, in the Division of Aberdeen, on red Karoo soils, mostly flat country, 200 ostriches running with the goats. The extent of the grazing ground is about 8,000 acres, enclosed. There are about 200 thoroughbred, and 600 Colonial selected, amongst the flock. Glycerine dip is used frequently, owing to severe drought experienced in the district. The average annual yield per animal is 4 $\frac{1}{2}$ lbs. in grease. Clipped 4 August, 1885. All samples are just as they came from the goat, and no part of any fleece has been removed saving a small sample from each reserved by Exhibitor until the Experts' reports are received.

(2.) Fleeces :—

- a.* Fleeces—imported (2); *b.* Thoroughbred Colonial (2); *c.* Halfbred (3);
d. Original Goat Skins (2).

75. Savage and Hill PORT ELIZABETH.
Mohair.

See Wool Exhibits.

76. Strauss, A. F. BOVENSTE FONTEIN, COLESBERG.
Angora Hair, 100 lbs., from Goats bred in the Colony.

Grown in the Division of Colesberg, on mountain and Karoo land in extent about 12,000 acres, the greater portion of which is enclosed. The average number of the flock is 2,500. The flock is free from disease, and no dip is used. The average annual yield per animal is from 3 lbs. to 4 lbs. Clipped in August, 1885.

- A. B. C. Hair from Kids 12 months old, the progeny of imported stock.
D. From a Kid 12 months old, out of mixed flock.

77. Theophilus Bros. PORT ELIZABETH.

Angora Hair, 100 lbs., from Cape goats by imported rams from Asia Minor.

Grown on farm at Claremont near Klipplaat, in the Jansenville district, on Karoo land, 12,000 acres in extent, unenclosed. The average number

of goats in flock is 3,000. No dip is used, and the average yield, per animal, is $3\frac{1}{2}$ lbs. Dipped in June, 1885. Gold Medal, S. A. Exhibition, Port Elizabeth.

78. **Wienand, F. F.** BEDFORD.
100 lbs. Angora Hair, from Colonial-bred goats.

BIRDS, FEATHERS, &c.

80. **Cape Commission.**

Group of Stuffed Ostriches.

See Exhibit of Stuffed Animals.

Collection of Skins of Cape birds.

81. **Hare, W.** KNYSNA.

Collection of Birds found in the Knysna Forest.

See Exhibit of Forest Department.

82. **Spence and Depass.** CAPE TOWN AND LONDON.

Specimens of the various Birds found on the Ichaboe Guano Islands, with Eggs.

See Guano Exhibits.

OSTRICH FEATHERS.

83. **Bensusan, M. L.** CAPE TOWN.

Ostrich Feathers.

An assortment of Wild Birds' Feathers from Namaqualand.

84. **Breda, Halkett & Co.** CAPE TOWN.

Ostrich Feathers; a general assortment

85. **Distin, John Sweet** . TAFELBERG HALL, NEAR TAFELBERG STATION.

Ostrich Feathers, 8 oz., Long Wing Feathers from two hen birds.
Exhibited for excellence of sample.

86. **Douglass, Arthur, M.L.A.** GRAHAM'S TOWN.

Ostrich Feathers.

Prime Whites, 1 lb. $6\frac{1}{4}$ ozs.

Fancy Coloured, 1 lb. $2\frac{1}{2}$ ozs.

Light Femina, 1 lb. $5\frac{3}{4}$ ozs.

Tipped White, 15 ozs.

Black, 1 lb. 1 oz.

Drab, 1 lb. $2\frac{1}{2}$ ozs.

White Tails, $10\frac{1}{4}$ ozs.

Femina Tails, $8\frac{1}{2}$ ozs.

White Chickens, $10\frac{1}{4}$ ozs.

87. Prince, Vintcent & Co. MOSSEL BAY.

Ostrich Feathers. From the District of Oudtshoorn.

88. Rabie, Peter & Philip. WELGERIVIER, WORCESTER.

Ostrich Feathers.

Prime Whites, 1 lb.

Feminas, 1 lb.

Long Black, 8 oz.

Drabs, 8 oz.

White Tails, 8 oz.

Fancies, 8 oz.

The above are tame feathers of six months' growth.

89. Douglass, Arthur, M.L.G. GRAHAMSTOWN.

Artificial Ostrich Hatching Machines, with eggs and stuffed young birds; illustrating the whole process of artificial hatching.

90. Cape Commission.

The process of Feather Dressing and Dyeing. Shown at the request of the Cape Commission, by Mr. Clarke Record, of Westbourne Grove.

GUANO.**92. Barry, M. CAPE TOWN.**

Samples of Guano.

93. Keet, R. M. MONTAGUE.

Bat Guano.

94. Spence and De Pass CAPE TOWN AND LONDON.

- (1.) Guano from the Ichaboe Islands, South West Coast of Africa.
- (2.) Ichaboe Guano treated with Sulphuric Acid.
- (3.) Specimens of the various birds found on the guano islands, with eggs.

*See also exhibit of seal skins and oil, and shark oil.***95. Stephan, Brothers. CAPETOWN.**

- (1.) Guano from Dassen Island, near Capetown.
Guano from Jutten Island, near Capetown.

Dassen Island produces about 600 tons, and Jutten Island about 500 tons. in the season.

- (2.) Salt. Coarse and fine, from Yzerfontein, near Capetown.

From a natural pan, producing about 10,000 bags per year.

96. Wilman, Spilhaus & Co. CAPETOWN.

Guano, 10 lbs. in glass jar. Exhibited to show quality of South African Guano used by farmers as manure for cereals.

Contain from 4 to 12 per cent. of Ammonia, 25 to 40 per cent. of Phosphates.

FISHES.

98. Morstatt, H. CAPETOWN.

Edible Fishes of the Cape of Good Hope.

A series of 36 water colour drawings, by the exhibitor.

TRIGLIDÆ.

1. *Trigla Capensis*. Cuv. & Val. (?) (*Roodé Knorhaan*; *red Gurnard of the Colonists*.)

Head, back, upper part of body, and fins rose-red. Belly silvery white, shaded by rosy patches. Scales very small; lateral line nearly parallel. Interior surface of the pectoral fins dark yellowish-green, with large black marks towards their bases, speckled with a number of pure white irregular spots. Iris red. Length 12 inches.

Baron CUVIER, in giving a very short diagnosis of this species, specimens of which were sent him from the Cape by DELALANDE, remarks that "the dark spots at the inner surface of the pectoral fins were wanting," but I have reason to believe that his specimens had faded, and that, through the effects of the spirits, in which they were preserved, the natural colours had been more or less obliterated. Experience, and the accounts of the fishermen here, convince me that this and the following species are the only ones of the genus caught in our Bays. CUVIER's observation that the fish bears a great resemblance to the *Trigla Kumu* of New Zealand is perfectly correct.

Flesh firm, but palatable. Caught in summer with the hook, but not very common in Table Bay. (Papp.)

2. *Trigla Peronii*. Cuv. & Val. (*Graauwe or bruine Knorhaan*; *grey Gurnard*.)

Head large; forehead sloping; body declining in breadth towards the tail. Muzzle projecting; teeth small but numerous; upper mandible longest, divided into two lobes, and beset at its margins with five denticles. Two spines, unequal in length, are placed above each eye, and a strong spine at each side of the occiput; opercular and scapular spines pointed, sharp. Anterior side of the first ray of the first dorsal fin slightly serrated; the second and third rays of that fin longer than the remaining seven. Ridges of dorsal groove, armed with a row of twenty-four blunt denticulations. Pectoral fins large, reaching beyond the vent; tail lunated. Lateral line smooth; scales small, oval. Head, back, and sides brownish-grey, mottled with white spots; belly pure white, mixed with purple. Pectoral fins olive-green on the inner surface, edged with azure, and embellished by a large black mark, sprinkled with white and sky-blue dots. Lower jaw and part of the pectoral and caudal fins pale red, tinged with yellow. Iris with white aurora-red. Length from seven to fourteen inches.

This species appears to be nearly related to *T. Lyra*, of Europe, and although it does not correspond in every particular with CUVIER's description, yet I think that it is the same fish which was anatomized by that prince of naturalists.

Not often caught in Table Bay; flesh equal to that of the preceding species.

(Papp.)

SCORPÆNIDÆ.

3. *Sebastes Capensis*. Cuv. & Val. (*Jacob Evertsen*.)

Body oblong, robust. Head large, bony, channelled above and between the eyes, and armed with spiny processes; gill covers and preoperculum strongly toothed at the margins. Eyes very large, protruding from their sockets. Mouth wide, gaping; lips fleshy; teeth crowded, paved, small, sharp, and curved in both jaws. Soft rays of dorsal fin longest. Liver unequally three-lobed, gall-bladder of an oval form, and the pylorus provided with numerous caecal appendages. Air-bladder large. Tile-red, with shades of orange, white, and yellowish-green; marked on the sides with a few flesh-coloured spots. Belly white, tinged with orange. Palate and peritoneum greyish-white. Length 12—15 inches. Called *Jacob Evertsen*, after a Dutch Captain, remarkable for a red face and large projecting eyes.

This fish, though common in Table Bay almost at all seasons, is highly prized for its flesh by most Colonists. (Pappe.)

SCIÆNINÆ.

4. *Sciæna Hololepidota*. Cuv. & Val. (*Kabeljouw*.)

Body elongated, stout. Head large, rounded, bony; mouth moderately large; both mandibles armed in front with a row of strong, short, pointed, cylindrical, hooked teeth; none on the palate. Dorsal fin divided by a deep notch; its soft rays longer than the spiny. Caudal fin truncate. Head purplish-blue, with aurora-red, mottled with yellow and green shades. Back and sides above the lateral line greenish-blue, marbled with faint orange and purple; fins often rose-red; lower part of the body pale flesh-red, mixed with green, purple, and white.

A large fish, from two to three feet long. Common on the coast and at the mouth of rivers; caught with the hook and drag-net. Is one of the staple fishes on the market, dried and salted like *Coel*, and exported to the Mauritius, and elsewhere. Its flesh, when young, is good, but firm and dry in adult individuals. (Pappe.)

5. *Otolithus Æquidens*. Cuv. & Val. (*Geelbeck*.)

Body oblong; head conical; mouth middle-sized; lower jaw pointed, longest. Teeth in both mandibles nearly alike, numerous, sharp, crooked; the anterior ones of the upper jaw, largest. First dorsal fin low, spiny; caudal simlunated. Back and sides above the lateral line, dull bluish-purple, intermixed with green and orange; upper surface of head flashed with aurora-red; lower parts silvery white, tinted with purple-grey. Inside of mouth gamboge-yellow.* Iris orange.

Clumsy, attaining a length of three feet and more. Flesh dry, but fit for salting. Common along the whole coast, where it is caught abundantly with the hook or net. It forms an article of food for the poor and *lary*, and it is also prepared for exportation. (Pappe.)

* Hence the vernacular name *Geelbeck* (yellow mouth).

6. *Cheilodactylus Fasciatus*. Cuv. & Val. (*Steenvisch*.)

Body oblong, spindle-shaped; head small; lips fleshy, retractile; the upper one longest. Eyes middle-sized, placed near the crown; mouth small; teeth velvety. The five last rays of the pectoral fins extended beyond their membrane, cartilaginous; second ray largest, being three inches long; the other three, shorter and shorter. Caudal fin forked, scales large, almost quadrangular; seven longitudinal stripes, covered with smaller scales, along the whole extent of the dorsal fin. Head olive-green, intermixed with orange; upper part of sides brimstone-yellow, tinged with green, purple and orange. Body crossed by five or six irregular vertical purplish-brown bands. Belly yellowish-white, mottled with olive-green. Mouth and pectoral fins deep orange; the lengthened rays of the latter rose-red, upper ones and tail variegated with purplish

lines. All other fins yellowish-green, with purplish brown stripes or blots. Iris yellow. Length 13, breadth $4\frac{1}{2}$ inches.

A good table fish; caught with the hook. Not very abundant in Table Bay.

(Pappe.)

7. *Cheilodactylus Brachydactylus*. Cuv. & Val. (*Steenklipvisch*; *Pompelmoesje*).

Body oval; head small; lips fleshy, the upper one a little projecting; mouth obtuse; teeth criniform. The last six rays of the pectorals cartilaginous, slightly detached from their connecting membrane, the second and third of them longest. These are rose-red, while the remainder, as well as the ventral fins are of an orange hue. Opercular and pre-opercular scales very small; those of the body rather large. Head, back and flanks greenish-brown, lower parts and belly silvery-white. Operculum and pre-operculum rose-red, tinged with silver and golden bronze. Middle-line sprinkled with six or seven dirty-white irregular dots. Fins brownish-green. Iris silvery, encircled by a yellow ring; pupile dark-blue. Total length 7 inches, breadth $2\frac{1}{2}$ inches.

Lives amongst the rocks at Green Point, and feeds on small crustaceæ. Its flesh is tender and wholesome.

(Pappe.)

SPARIDÆ.

7. *Sargus Hottentottus*. A. Smith. (*Handberger*.)

Body broad, nearly ovate; head small, projecting in front; incisors firm, trenchant, similar to the human. Colour blackish-brown, tinted with purple; back and sides crossed by five broad black vertical bands; belly silvery-white. Length about 18 inches.

Common to Table Bay from June to August, and much in request particularly at the time when it is with roe. It is also cured and pickled for economical purposes. From the circumstance of its being chiefly taken in deep water, near a place called *Hangberg* (overhanging rock), it has received its present colonial name. It feeds on shell-fish and is caught with the hook.

(Pappe.)

9. *Sargus Capensis*. A. Smith. (*Hottentot Fish*.)

Body much resembling that of the former, but more attenuated at base, and destitute of any bands or vertical stripes. Head purplish; back dull bluish-green, with a metallic gloss; sides beneath the longitudinal line, silvery with a reddish tint. Iris white.

Caught at all seasons with the hook, and is not only a superior table fish, but forms, when salted and dried, an article of exportation. Mostly confined to Table Bay and the West Coast, where it is found abundantly. Length from 12 to 14 inches.

(Pappe.)

10. *Chrysophrys Globiceps*. Cuv. & Val. (*Stompneus*.)

Forehead arched, rounded, almost gibbous, muzzle obtuse, small; teeth thick, firm, tubercular, standing in four rows on the sides of both jaws. Body broad. Crown above the eyes olive-green with aurora-red. Back bluish-grey; belly white, silvery; a black spot at the insertion of the pectorals; iris red; pupil dark. The younger individuals have six or seven brown longitudinal stripes, and six transversal dark bands, which disappear in the adults.

A favourite fish, and often caught in great abundance during summer, with the drag-net. It also makes an excellent pickle-fish.

(Pappe.)

11. *Chrysophrys Laticeps*. Cuv. & Val. (*Rooede Steenbrasem*.)

Head very large, gibbous; crown elevated, broad, convex, tapering towards the snout; eyes almost vertical; mouth of a moderate size; muzzle pointed, but blunt; lips fleshy. Upper mandible armed in front with four large, strong, conical teeth, and the lower one with six corresponding with those of the upper; middle teeth smaller than the lateral. Rows of sharp pointed teeth inside the mouth, followed by bands of round,

granular molars. Soft rays of dorsal fin higher than the spiny; caudal nearly truncate. Scales large. Liver divided into two unequal lobes of an ochreous hue, and with the gall-bladder proportionally small; gullet dilated into a big, strong, muscular stomach, of an oblong shape; pylorus supplied with four short cæcums of different lengths. Swim-bladder large, simple, and firm. Intestines a little longer than the whole fish. Head faint purple with aurora-red; back dull greyish-green; sides and belly slightly flesh-red, on silvery ground. Groove between the maxillary and intermaxillary bones, saffron-yellow. Fins reddish.

This bulky fish often exceeds $3\frac{1}{2}$ feet in length and 14 inches in breadth. It is very voracious and feeds generally on crabs and cuttlefish (*Sepia* and *Loligo*). As food it is much prized, and is also cured for exportation. Not very common in Table Bay, but caught abundantly in False Bay and on the shores of Hottentots' Island.

(Pappe.)

12. *Chrysophrys Cristiceps*. Cuv. & Val. (?) (*Roman*.)

Body of a beautiful orange colour, shaded by silver. Head and jaws of a deep orange hue. Between the eyes a falcated band of pure indigo blue, and a narrow stripe of the same colour, running along each side of the dorsal; a broad, silvery line extends from the dorsal nearly to the anal fin. All fins crimson, with a shade of silver. Iris red. Young specimens do not exhibit the vivid hues so remarkable in adults. Head and back reddish-brown; flanks and belly orange. An azure dot stands in the centre of the middle line.

One of the prettiest and most delicious fishes on our markets. Its flesh is generally acknowledged to be a superior dish. It is common in the waters east of Table Bay, and especially near the *Roman Rock*, where it is caught with the hook and drag-net in great numbers.—A strayed individual, caught in Table Bay on the 14th of June, 1849, measured 16 inches in length, and 7 in breadth.

(Pappe.)

13. *Chrysoblephus Gibbiceps*. Swains. (*Baaische Rooie Stomp-neus*; *Poeskop*.)

Head very large, broader than the body. Front obtuse, truncate; the profile almost vertical. Eyes near the crown, which is elevated and gibbous. Lateral line terminating at the lower side of the tail (Swainson). Mouth middle-sized; teeth strong. Back and sides rose-red; lower parts silvery. Length $1\frac{1}{2}$ to 2 feet.

A large snow-white spot in front of the forehead enhances the beauty of this singular fish, which ranks amongst the choicest in this Colony. It is rare in Table Bay, but frequently caught with the hook in False Bay, Mosterd Bay, Fishhoek, and in similar localities. It is also exported.

(Pappe.)

14. *Pagrus Laniarius*. Cuv. & Val. (*Dageraad*.)

Front higher than in *Chrysophrys*. Strong conical teeth in the upper jaw, which are directed forward and project from the mouth, the two outer teeth being longer and thicker than the rest, and those of the lower jaw much smaller. The whole fish is of a dark rose-colour, with a black spot at the insertion of the pectorals, and with another on the extremity of the dorsal fin. Lower jaw white; iris silvery; length 12 inches.

Highly prized for its delicious flesh. Not found in Table Bay, but frequently caught with the hook in the waters towards the east and south of Cape Town. This handsome fish owes its surname of *Laniarius* (butcher) both to its colour and to its sharp teeth and voracity.

(Pappe.)

15. *Lithognathus Capensis*. Swains. (*Blaauwe Kaapsche Steen-brasem*.)

Body elongated, fusiform; head lengthened, projecting; mouth small, terminal; the maxillaries thick, enlarged, very hard; tail slightly forked (Swainson.) Back dark marine-blue, belly white tinged with purple. Length $2\frac{1}{2}$ feet and upwards.

An excellent table fish and very fit for pickling and salting. Caught with baited hooks during summer; especially in Hout Bay.

(Pappe.)

16. *Pagellus Afer*. Mihi. n. sp. (*Roode Kaapsche Stompneus*.)

Body ovate, broad, somewhat compressed. Lower jaw a little shorter than the upper one. Mouth obtuse; front teeth conical, stronger and larger than those within; both jaws paved internally with two rows of round molars. Lateral line well marked. Head and back aurora-red, mottled with blue and gold on a silvery ground. Sides of the body crossed by five or six sky-blue, broken, longitudinal stripes. Lower mandible and belly white. All fins faintly rose-red; apex of the tail orange. Iris purplish. Length 12—14 inches. Dorsal, $1\frac{1}{2}$. Anal, $\frac{3}{4}$. Caudal, 11. Pectoral, 15. Ventral, $\frac{1}{2}$.

One of the best fishes in the market. Its flesh is white and delicious. Superficially examined, it bears some resemblance to the Cape Silverfish (*Dentex Argyrozona*), from which it is easily distinguished, not only by its broader form and less vivid hue, but also by the absence of the six rose-red longitudinal bands, and by the formation of its teeth. Caught with the hook during winter, and pretty common on the market.

(Pappe.)

17. *Dentex Rupestris*. Cuv. & Val. (*Bastard Silverfish*; *Seventy-four*.)

Body large, bulky; teeth of the outer row large, cylindrical, curved and pointed; the four front of its jaws strongest. Scales large; lateral line broken. Back and sides above the lateral line aurora-red, clouded by ultra-marine blue, green, and faint purple, with an orange tint towards the tail. Lower parts of the body aurora-red, tinged with orange, and shaded with ultra-marine blue (A. Smith). Length, about 2 feet.

Rarely found in Table Bay, but considered one of the very finest fishes in the Colony. It is chiefly confined to the east of the Cape, where it is caught with the hook or net in great abundance. It is also cured for foreign markets.

(Pappe.)

18. *Dentex Argyrozona*. Cuv. & Val. (*Silverfish*.)

Body oblong; eyes large; mouth of a moderate size; teeth like those of the preceeding species. Head, back, and sides above the lateral line aurora-red on a silvery base; hue below that line faint flesh-red, striped with five to six longitudinal, pale rose-red bands. Belly white, silvery; fins purplish-red; iris scarlet. Length from 16 to 20 inches.

This very voracious fish feeds principally on small fish and crabs. It is common on the Cape market throughout the year, and forms also an article of export.

(Pappe.)

19. *Blamo Steentje* (?)20. *Cantharus Blochii*. Cuv. & Val. (?) (*Windtoy*.)

Body broad, oval. Head tapering towards the muzzle, forming a curvature above the eyes. Jaws free, somewhat protractile. Anterior teeth small, but sharp; inner rows velvety. Spines of dorsal fin strong, spiny; pectoral fins round at base and pointed at the apex; scales middle-sized; Tail unequal, upper side longest. Length 12 inches; breadth nearly 5 inches. D. $1\frac{1}{2}$; A. $\frac{1}{3}$; P. 17. V. $\frac{1}{2}$. C. 17. Head and back olive-green; sides silvery, with a faint rosy gloss; fins pale red-rose. Pectoral fins with a black spot at their insertion. Iris silvery.

A delicious table fish, more commonly caught in winter, and often put up in bundles along with *Sargus Capensis* (Hottentot fish), from which it is easily distinguished by a very superficial examination.

(Pappe.)

21. *Cantharus Emarginatus*. Cuv. & Val. (*Dasje*.)

Body lanceolate; front roundish, with a curvature hardly perceptible; muzzle pointed and partly concealed beneath the suborbital bone, which has a deep emargination in front of the eyes. Front teeth small, but crowded, pointed and sharp. Scales minute; lateral line moderately bent and well marked. D. $1\frac{1}{2}$. A. $\frac{1}{3}$. V. 5. P. 15. C. 17. Head, back, and sides faint brown, on a silvery ground; a greenish-blue metallic lustre

above and in front of the eyes. Body striped with some narrow, yellowish, longitudinal bands; pectoral fins, with a dark spot at their base; abdomen white, tinged with light brown. Length, 12 to 14 inches.

Rare in Table Bay, but more frequently caught in the several Bays to the East of the Cape. Its flesh is highly esteemed as food. (Pappe.)

SQUAMIPENNES.

22. Dipteronodon Capensis. Cuv. & Val. (*Galjoenvisch*, *Galleon-visch*.)

Body oval; outer teeth strong, large, trenchant, resembling those of *Sargus*. Lips fleshy; mouth proportionally small. Two dorsal fins; the second as well as the anal, and part of the caudal, thick, covered by very minute scales. Head, back, and fins ash-coloured grey, or faint brown; sides with six silvery vertical bands riching the middle of the belly, which is silvery-white and tinged with purplish-red. Length, from 15 to 17 inches.

This fish, more plentiful in the Western Division of the Colony, is highly esteemed as food, and always fetches a good price. It is, however, disliked by some, on account of the many black veins traversing its flesh, and is at times rather unwholesome from being too rich, and requiring good digestive organs. It is caught with the drag-net during summer. (Pappe.)

SCOMBERIDÆ.

23. Scomber Capensis. Cuv. & Val. (*Haljcord*.)

Body oblong, adipose; muzzle obtuse; lower jaw somewhat projecting; teeth numerous, small, velvety. First dorsal fin spiny, connected by a membrane; second dorsal longer than the anal. Pectoral and ventral fins equally long; caudal forked. The lateral line is bent at the upper part of the body, but becomes straight towards its end. Head, back, and sides dark marine-blue, with a broad greenish-yellow streak, running from eye to tail, which latter is crested. Abdomen white, silvery: fins yellowish-green. Iris white.

A large fish, measuring from two to three feet. It is rather uncommon in Table Bay, but taken with the hook occasionally. Its flesh being very rich and deemed unwholesome, it is not in much request, and is therefore chiefly used as pickle fish. (Pappe.)

24. Scomber Grex. Mitchill. (*Mackerel*.)

Body oblong, rounded, fat, smooth, covered with minute scales; teeth small; dorsal fins two; caudal fin deeply forked; tail bearing finlets; its sides not carinated at base. Has a natatory bladder. Form and colour much like that of the common Mackerel. Body and sides light-green, with darker stripes of the same hue. Length, about 18 inches and upwards.

This species, which is caught with the line, is little liked, on account of its greasiness. It is common in Table Bay during winter, and is chiefly used pickled. (Pappe.)

25. Thyrsites Atun. Cuv. & Val. (*Snoek*.)

Body cylindrical, elongated; jaws protracted; the lower one longest. Mouth wide; teeth large, conical, trenchant, sharp; the palate beset with smaller ones. First dorsal fin very long; tail without a lateral keel; skin rather naked. Back blackish-blue with metallic lustre; sides and belly silvery. Length, often exceeding 3 feet.

This voracious fish is caught with the hook, in immense numbers, almost all the year round, but more frequently during summer. It is very strong and ferocious, and is despatched, after being pulled on board, by blows on the head, with a kind of knobkierie. Its flesh is highly prized by the majority of the Colonists, who also salt and dry it for home consumption, and as an article of trade and of exportation to the Mauritius, &c. (Pappe.)

26. Temnodon Saltator. Cuv. (*Elftvisch*.)

Body oblong, slightly compressed; mouth large; lower jaw longest;

both mandibles armed in front with detached, trenchant, pointed sharp teeth, and within and behind with smaller ones. Dorsal fins, two; first smaller and lower than the second; its rays jointed by a delicate membrane. Tail destitute of a lateral keel, and spurious fins. Length about 2 feet.

This fish is uniformly lead-coloured, shaded with dark-green on its back. From leaping now and then out of the water, it has obtained its name of Saltator (Jumper). It is held in great esteem as a table-fish, and the younger individuals are truly deemed a dainty. It is often caught in Table Bay, particularly in summer.

(Pappe.)

CLUPIDÆ.

27. *Elops* Sawms, Sein Fish or Sea Galley Wasp of Jamaica. (Shaw).

Body rather elongate, moderately compressed; abdomen flat; scales small adherent; lateral line distinct. A narrow osseous lamella attached to the mandibular symphysis covers the part between the mandibles. Snout pointed, mouth wide, anterior; inter-maxillary short; maxillary forming the lateral part of the mouth. Bands of villiform teeth in the jaws on the vomer; ptalatine and perygoid bones on the tongue and on the base of the skull. Dorsal fin opposite the ventrals; anal rather shorter than dorsal. Gill membranes entirely separate with very numerous branchiostegals. It exceeds a length of 3 feet.

This fish is called by the Port Elizabeth fishermen the "Algoa Bay Salmon." It is not, however, esteemed as food. Spread all over tropical and sub-tropical seas.

(Gunther.)

28. *Caranx Trachurus*. Lacep. (*Maasbanker*; *Bastard Mackerel*).

Body spindle-shaped, broad, compressed. Each jaw with a row of straight minute teeth. Lateral line armed with scaly, carinated, prickly bands. Dorsal fins, two; first low and small. Pectoral fins long, falcated; two detached spines before the anal fin. Scales minute. Upper part of the body of a bluish lead-coloured hue; lower parts silvery white. Iris gilt. Length, 12 to 18 inches.

Caught in winter at both ends of the Colony. Its flesh is well-flavoured and wholesome.

(Pappe.)

MUGILLIDÆ.

29. *Mugil Capensis*. Cuv. & Val. (*Harder*; *Mullet*).

Body oblong, nearly cylindrical, robust. Head small, broad, flat; muzzle, short, blunt; lower jaw with a depression, corresponding to a prominence in the upper one. Superior mandible provided with a row of fine, diminutive teeth. Scales rather large. Dorsal fins two; remote from each other; first with four spiny rays; pectoral fins pointed, caudal forked. Surface of head and back dark steel-blue, mingled with oil green; sides beneath the lateral line greyish-white, on silvery ground; cheeks, lower jaw, belly, and ventral fin white. Fins greyish-green. Body crossed by nine narrow longitudinal lines. Interior of mouth pure-white; iris silvery. Length 14 inches; breadth nearly 4 inches.

This species, as well as the following, enters the mouth of several rivers. Nursed in ponds, it grows extremely fat, and attains an uncommon size. A specimen so fed measured 19 inches.

(Pappe.)

BLENNIDÆ.

30. *Blennius Versicolor*. Pappe. }
31. *Blennius Rubescens*. Pappe. } (*Klipvisch*.)

Body elongated, smooth, slimy, spindle-shaped; head tick, obtuse; forehead tapering towards the snout. Muzzle short, truncate; mouth small; lips fleshy; teeth in several rows; those of the first, strong, pointed,

conic, hooked; inner ones small, paved. Dorsal fin nearly as long as the body, commencing right over the crown of the head; its first three rays longest, spiny, separated from the soft ones by a deep emargination. Ventral places before the pectoral fins, and consists of only two rays. A small tentacular, three-fin appendage above each eye-brow; and a tubercular excrescence near the anus, in both sexes. It is ovoviviparous. No fish perhaps displays a greater diversity of hues than this, and to make out any specific difference amongst its many varieties is next to impossible. I am thus inclined to unite them under one common denomination, expressive at once of the changeable character of their colours. The following are the chief varieties observed by me in fresh specimens:—

1. Prevailing colour blood-red, mottled with greyish white irregular blots; abdomen purplish on a white ground; fins deep-red, tinged with greyish-green. Iris purple. Length 12 inches. Caught principally amongst the rocks of Robben Island.

2. Head, back, and sides dark purple, marbled with reddish-brown bands, flesh-red, orange, and pale yellow marks. Belly white, shaded with purple. Pectoral rays striped with purplish-brown bands; dorsal caudal, and anal fins dull-brown, spotted with yellowish-green dots. Iris purple. Length 10 to 12 inches. (*Blenius rubescens*. *Lichtenst*?) Extremely pretty; caught along with the former.

3. Upper part of body pale yellowish brown; head olive-green; sides and belly gamboge-yellow, sprinkled with irregular greenish-white marks; pectoral and caudal fins without bands; dorsal and anal with faint-green spots. Iris yellow. Length 8 to 10 inches.

4. The whole of back, sides, and fins olive-green; belly of a deeper yellow tint, with some white blots along the lateral line. Iris yellow. Length 6 to 8 inch.

The *Klip-fish* is greatly reputed for its flesh, which is nice, well-flavoured, and wholesome. (*Pappe*.)

32. John Brown. (?)

SILURINÆ.

33. *Bagrus Capensis*. A. Smith. (*Bagger*).

Body oblong, thick, smooth, slimy; head large, broad, nearly flat above; muzzle round, blunt; upper lip fleshy, with a barbel on both sides; teeth crowded, velvety; chin supplied with four barbels, which are shorter than those of the upper jaw. Dorsal fins two; second flat, fleshy, smaller than the first; pectoral fins moderate; anal large, caudal deeply forked. Upper part of head, back, and sides dark greenish brown; lower parts shaded irregularly with blue, yellow, and silver, and flashed with a bronzy lustre. Belly dull greyish white, speckled with small brown dots, and clouded with purple. Base of tail red; fins faintly flesh-coloured. Iris yellow. Length 12 to 16 inches.

Owing to its ugliness, this curious fish, which hides itself amongst stones in muddy water, the better to entrap its unsuspecting prey, is, from popular prejudice, less prized than it deserves. Its flesh is extremely delicate, and bears a greater resemblance to that of the Eel, than that of any other sea-fish caught in the Colony. (*Pappe*.)

GADIDÆ.

34. *Cadus Merluccius*. Lin. (*Stokvisch*; *Hake*.)

Body elongated, slender; head broad, bony, depressed. Lower mandible protruding beyond the upper one; mouth very wide; teeth long, sharp, in a double row in each jaw; first row smaller and shorter than the inner

one. Two dorsal fins; first three-angular; caudal fin slightly lunate; ventral ovate, with five rays. No barbel under the chin. Scales large. Upper part of the body dusky-brown, with a bluish, steel-coloured gloss; belly dirty-white. Iris yellow; inside of mouth black. Length from 2 to 3 feet.

It is remarkable that this fish, a notorious denizen of the European seas, was utterly unknown at the Cape of Good Hope before the earthquake of 1809 (4th December). At first it was scarce and sold at exorbitant prices (4s. 6d.) Since that period it has yearly increased in numbers, and is now a standard fish on the market, being caught in great abundance.

English writers on Ichthyology comment very unfavourably on its merits, and call it a "coarse fish, scarcely fit for the dinner table." At the Cape its qualities are generally and fully appreciated; in fact, its flesh is highly delicate and but little inferior to that of the *Haddock* (*Gadus Eglefinus*). At times it makes its appearance in large shoals. It is then abundantly caught, salted, and dried for exportation. The cured or dried *Cape Stock-fish* is an excellent dish, far superior to that insipid stuff introduced from Holland or other countries. (Puppe.)

XIPHIURIDÆ.

35. *Xiphiurus Capensis*. A. Smith. (*Koningklipvisch*; *King's Rock-fish*.)

Body almost cylindrical, moderately robust. Head large; two rows of larger teeth in the upper, one of smaller ones in the lower jaw; vomer armed with teeth of the same description. Two barbels pending from the under surface of the lower mandible. Pectoral fins of an oval form; dorsal, caudal, and anal fins united. Tail narrow, tapering, compressed, sword-shaped. Ventral fins, none. Scales very small (A. Smith). Has a large and very firm air-bladder. Flesh-coloured and clouded by a variety and intermixture of hues, difficult to describe. Lower surface, belly, and point of tail tinted with pale purple.

This fish, in some respects, seems closely allied to the family of the *Gadidæ*, while on the other hand it somewhat resembles the *Muraenidæ*. Although its habitat is deep water, and not (as its name implies) amongst cliffs and rocks, yet it justly deserves the title of *King's-fish*, being, without exception, the most desirable fish obtainable in our bays. It is rather scarce, is an expert swimmer, appears on the coast as a harbinger of rough, stormy weather during winter, and commonly sells at very remunerating prices. Dr. ANDREW SMITH, the intelligent South African traveller, gave the first description of this fish in his admirable *Illustrations of the Zoology of South Africa*. It was, however, known previously to *Barrow* (1797), who, in his travels (p. 30), mentions it in the following terms: "Another *Blennius*, called *King's Rock-fish*, is sometimes caught (in Table Bay), to which, from its resemblance to the *Muraenæ* of the ancients, naturalists have given the specific name of *Muraenoides*." (Puppe.)

36. *Raia Maculata*. Montag. (*Rog*; *Skate*; *Spotted Ray*.)

Body rhomboid, horizontally flat on both sides; snout narrow, pointed, blunt; mouth, nostrils, and gills on the under surface of the body. Teeth in many rows in both jaws; sharp, pointed, conical, and curved in the *male*; paved, broad, and flat in the *female*. Tail long, thin, three-sided, furnished all along its edges with three lines of strong, hooked, but irregular spines, and with two small dorsal fins towards its end. Both surfaces more or less smooth, but snout and upper margin of the large pectoral fins armed with clusters of hooked spine in the *male*, and with curved tubercular denticles in the *female*. *Male* provided with cylindrical cartilaginous appendages (claspers) to each ventral fin. *Female* larger than the *male*. Length 2½ feet and more. Colour above pale yellowish-brown, sprinkled with numerous irregular faint bluish-grey spots; under surface somewhat rough, greyish-white, tinged with purple.

"A good table fish, and a forerunner of bad weather. It is caught with the net.

(Puppe.)

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101. Hickey, Margaret F. ADELAIDE, FORT BEAUFORT.

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SILK.

102. Clarke, H. D. GRAHAM'S TOWN.

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103. Hiddingh, Dr. J. M. NEWLANDS, CAPETOWN.

Spun Silk.

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104. Holdstock, E. W. EAST LONDON.

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106. Roberts, Valentine. UITENHAGE.

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107. Newdigate, Miss C. B. FOREST HALL, KNYSNA.

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Amaryllis blanda	Crinum longiflorum
Agapanthus (<i>vide list of species</i>)	" Powellii
Anthericum Graminifolium	" riparium
Asparagus (<i>vide list of species</i>)	" revolutum
Aponogeton distachyon (water violet)	" Mooreanum
Aster tenella	" aquaticum
Anomatheca cruenta	" capensis
Arectotus, several varieties	" " flore albo
Anchusa capensis	" " flore rosea
Agathea (Charieis) coelestis	Cotyledon, varieties
Agrostis capensis	Czackia liliastrum
Brunsvigia varieties	" " Giganteum
Babiana (<i>vide list of species</i>)	Chironia, of sorts
Bobartia aurantiaca	Cheilanthes hirta
Burchellia capense	Cissus capensis
" speciosa	" Rhombœa
Briza Geniculata	Didymocarpus Rexii
Blechnum Australe	Dianthus prostratus
Coleonema rubrum	Disa, grandiflora and varieties
Chrysocoma comarea	Diosma ericoides
Crassula coccinea	Diotes Bicolor
" arborescens	" Huttonii
" falcata	Drosera capensis
" jaminea	Eucomis, of sorts
" odoratissimea	Erica (<i>vide list of species</i>)
" perfoliata	Euphorbia, various species
" lactea	Erodium ribifolium
" falcata	

Encephalartos caffra	Oxalis, various species
„ Altensteinii	Plumbago capensis
„ tridentatus	Phoenix reclinata
„ Lehmanii	Phenocoma prolifera
„ Millsii	Pteris hastata
„ cycadæifolius	Pavetta caffra
„ horridus	Pelargoniums (<i>vide list of varieties</i>)
„ Friderici-Guilielmi	Phalangium liliago
„ villosus	„ ramosum
„ Vroomii	Prionium palmatum
Ferns, in many species	Richardia Æthiopica
Ferraria undulata	Ruellia ciliata
Fagelia bituminosa	Ricinus lividus and hybrids
Freesia (<i>vide list</i>)	Spergula pallida and variety
Gladiolus, various sections	Sparmannia Africana
Gardenia Thunbergii	„ „ fl. pl. (double
„ Florida	flowers)
„ Globosa	Streitzia reginæ
„ citriodora	„ augusta
Gazantias, various species	Strumaria crispa
Gastronema Sanguinea	Senecio elegans var : many colours
Galtonia candicans	Sphenogyne speciosa
Gasteria, various species	Tritoma Burchelli
Helichrysum, of sorts	„ caulescens
Hemanthus, varieties	„ Mac Owanii
Harworthias, various species	„ Media
Heliophilla	„ Nobilis
Ixia, varieties	„ recurvata
Kleinia repens	„ Rooperii
Lachenalia (<i>vide list of species</i>)	„ uvaria
Lobelia erinus	„ glaucescens
Leonotus Leonorus	„ grandiflora
Lantana Salvifolia, and Hybrids	Testudinaria Elephantipes
Myrsiphyllum asparagoides	Todea Africana
Mesembryanthemum, various species	Toxicophloeæ spectabilis
Melanthus major	„ Pheenbergii
Nerines, various species	Vieusseuxia Glaucois
Nymphaea scutifolia	Witsenia corymbosa
Ornithogalum, various species	

AGAPANTHUS.

Umbellatus	Umbellatus flore-pleno
„ candidus	„ fol. variegatis
„ maximus	„ Mooreanus

ASPARAGUS.

Plumosus	Virgatus
„ nanus	Strigulosus
Tenuissimus	Falcatus
Decumbens	Verticillatus

BABIANAS.

Attraction	Ringens
Bicolor	Sulphurea
Celia	Speciosa
Disticha	Tubata
Hellas	Villosa
Justine	„ do pink var :
Rosea grandis	

CLIVIA (IMANTOPHYLLUM).

Gardnerii	Miniata
Aitonii (nobilis)	„ Maxima

ERICAS (HEATHS).

Alopecuroides	Loevis alba
Aitoniana	Mutabilis
Aristata	McNabbiana
Ampullacea in variety	Mammosa
Bowieana	„ pallida
Barbata	Metulceflora bicolor
Blanda	Mirabilis
Candidissima	Melanthera
Cruenta	Propendens
Cavendishiana	Pulcherrima
Colorans	Perspicua
Cerinthoides coronata	„ nana
Depressa	Parmentieriana rosea
Everiana	Regerminans
Elegans	Rubercalix
Eximia	Sindryana
Favoides elegans	Suaevolens
Gracilis	Savilleana
Grandinosa	Squarrosa
Hybrida	Tricolor, in variety
Hartnelliana	Vestita, in variety
Intermedia	Ventricosa, in variety
Jasminiflora alba	Vernix coccinea
Lambertiana	Wilmoreana
Linnæoides	

EUCOMIS.—Punctata and Regia.

FREESIA.

Refracta	Leightonii
„ alba	„ major
„ aurea	

GLADIOLUS.

(Species from the Cape.)

Augustus	Grandis
Alatus	Hirsutus
Bicolor	Inflatus
Brevifolius	Pilosus
(Brown Species.)	Purpureo-auratus
Blandus	Psittacinus
Cunonia	Recurvus
Colvillei	Ramosus
„ alba	Saundersii
Cruentus	Tristis
Cardinalis	Watsonius
Floribundus	

Early-flowering English Hybrids.—(Blandus Section.)

A Collection of 30 Beautiful Varieties.

Cardinalis Section.

Many very beautiful hybrids; those known as Truffauts and Krelage's hybrids. 30 varieties.

Ramosus Hybrids.

A section of robust habit, very brilliant colours. Some well-known varieties are Queen Victoria, Ne Plus Ultra, Formosissima, Insignis, Prince Albert, &c., &c.

Gandavensis Section.

These are a magnificent section growing from 3 to 4½ ft. high, with very large flowers, and of colours most beautiful. Among bulbous flowering plants these are most brilliant:—

Amalthee	Felicien David	Reine Blanche
Angele	Horace	Robert Fortune
Arsinoe	Ida	Roi Leopold
Astree	Isabelle	Romulus
Athalie	Jeanne d'Arc	Rosita
Benvenuto	La Favorite	Sapho
Calypso	La Quintinie	Sir W. Hooker
Canari	La Poussin	Stella
Canova	Lord Raglan	Sylphide
Celimene	Margarita	Sylvie
Charles Dickens	Maria Dumortier	Thalie
Cicéron	Napoleon III.	Themis
Clemence	Nelly	Thomas Methvin
Colbert	Niobe	Thomas Moore
Conde	Ophir	Thunberg
Delicatissima	Penelope	Titania
Diamant	Pericles	Uranie
Eglantine	Phidias	Van Dyck
Estandard	Primatrice	Venus
Eugene Ramay	Princess of Wales	Zenobia

HERMANTHUS.

Albo-maculatus	Magnificus
Carneus	Natalensis
Coccineus	Tigrinus
Katharinos	

LIXAS.

(Species from the Cape.)

Aurea	Flora
Crateroides	Galatea
Crateroides var : alba	Gem
Maculata	Golden drop
Viridiflora	Horatius
(Hybrids, very beautiful colours.)	Lady Slade
Aimable	Lavinia
Aurantia major	Lucretius
Barbara	Magnifica
Bridesmaid	Model
Bucephalus	Nosegay
Brutus	Pallas
Bucephalus major	Pearl
Cæsar	Rosea multiflora.
Cupid	" plena
Cassandra	Sunbeam
Cato	Titania
Comus	Titus
Conqueror	Victoria
Coronet	Virgilus
Diana	Vulcan
Donatello	Wilhelmina
Duchess of Edinburgh	Fine mixed
Eveliana	

LACHENALIAS.

Aurea
Nelsoni
Atroviolacea
Contaminata
Fragrans
Gigantea
Luteola
Pendula
Orchioides

Pustulata
Quadricolor
Orthopetala
Rubida
Stolonifera
Tricolor
Uniflora
Versicolor
Viridis

ORNITHOGALUM.

Aureum
Longibracteatum
Scillioides

Lacteum
Thyrsoides

NERINES AMARYLLIS.

(The Guernsey Lily.)

Corusca
" major
Elegans
Flexuosa
Fothergilli major
Fothergilli
Humile angustifolia

Plantii
Pudica
Pulchella
Rosea
Sarniensis
Undulata
Venusta

PELARGONIUMS.

Anemonifolium
Ardens major
Astragalifolium
Blandfordianum
Capitatum
Conspicuum
Crispum
Denticulatum
Diadematum
Echinatum
Flavum
Gibbosum
Glaucifolium
Glutinosum
Graveolens
" fol : variegata

Hirsutum
Jatrochæfolium
Lateripes
Melananthon
Multiradiatum
Odoratissima (apple scented)
Peltatum
Pumilum
" fol : variegatum
Quercifolium
Radula
Reflexum
Scopiflorens
Selectum
Tomentosum
Triste

SPARAXIS.

Alba
Bulbifera
Grandiflora
" purpurea
Lutea

Lady Carey
Pavonia
Tricolor
Victor Emanuel

TITTONIAS.

Amœna
Aurea (Crocosma)
Brilliant
Crocata
Eclair
Fulgens
Laura

Longiflora
" alba
Prince Alfred
Speciosa
Squallida
Undulata

VERTHEMIA.—Glaucia and Viridifolia

111. Templeman, Robert

CAPE TOWN.

Cape Flowering Plants, as enumerated in this subjoined list:

Grown by Messrs. Henderson and Son, from Bulbs supplied by Robert Templeman. Collected at the Knysna, Tulbagh, Worcester, Caledon, Wellington, Groen Kloop, and other places.
The Bulbs are ready for export from about 1st December to March.
Collections from 10s. to £20.

Agapanthus dwf. blue species
Acidanthera, sp.
Amaryllis Belladonna
Ammocharis falcata
 " v. nivea (new)
Babiana disticha
 " ringens
 " tubata
 " sulphurea
 " villosa
 " var. pink
 " Seedling, vars.
Bonatea Speciosa
Brunsvigia Josephina
 " multiflora
Bulbine pugioniformis
Buphane ciliaris
 " toxicaria
Cyrtanthus obliquus
 " carneus
Ferraria undulata
Freesia refracta alba
 " aurea
Galaxia ovalla, v. purp.
Gethyllis ciliaris
 " spiralis
Geissorhiza Rochensis.
 " quadrangula
Gladiolus alatus
 " angustus
 " bicolor
 " blandus
 " brevifolius
 " cunonia
 " grandis
 " hirsutus
 " inflatus
 " pilosus
 " recurvus
 " tristis
 " Watsonius
 " brown species
Hæmanthus albifons
 " coarctatus
 " coccineus
 " puniceus
 " quadrivalvis
Hesperantha falcata
Hessea spiralis

Homeria spicata
Hyacinthus Corymbosa
Hypoxis stellata,
 " v. flava
Ixia aurea,
 " crateroides
 " " v. alba
 " maculata
Ixia viridiflora
Lachenalia aurea
 " contaminata
 " orchioides
 " var.
 " orthopetala
 " pendula
 " pustulata
 " rubida
 " tricolor
Lapeyrousea azurea
 " corymbosa
Melanthium junceum
Massonia pustulata
Montbretia lacerata
 " (*Tritonia crispata*)
Morea edulis flaveum
 " pavonia
Nerine corusca
 " Sarniensis
Ornithogalum aureum
 " candatum
Oxalis rubella fl. pl.
 " variabilis alba
 " africana calla
Synnotia bicolor
Sparaxis bulbifera
 " grandiflora purpurea.
 " tricolor
Strumaria crispa
Tritonia undulata
 " crocata
 " squallida
 " longiflora
Trichonema hirsutum
 " (yellow sp)
Vallota purpurea
Wachendorfia paniculata
Watsonia humilis
 " Meriana
 " plantaginea

Watsonia spicata
 „ *Alectroides*
 „ *fine dwf. crimson*

TUBEROUS PELARGONIUMS.
Pelargonium astragalifolium
 „ *hirsutum*
 „ *reflexum*

TERRESTRIAL ORCHIDS.
Diss. cornuta
Satyrium candidum
 „ *corneum*
 „ *coriifolium*
 „ *erectum*
 „ *marginatum*

Frere, Catherine F. **WIMBLEDON, LONDON.**

Series of Paintings of Cape Wild Flowers.

See Fine Art Section.

Holland, Mrs. **HAMPSTEAD, LONDON.**

Paintings of Cape Flowers.

See Fine Art Section.

Marcus, H. C. **MONTAGU.**

Cape Wild Flowers, a series of Water Colour Drawings.

See Fine Art Section.

Thwaites, Florence **WYNBERG.**

Cape Wild Flowers, a series of 10 Water Colour Drawings.

See Fine Art Section.

Wavell, Mrs. **S. KENSINGTON, LONDON.**

Cape Wild Flowers, 150 Water Colour Sketches, by the Exhibitor.

See Fine Art Section.

Cape Commission.

(1.) **Needle Tea in Tin Canister.**

This tea only grows in certain parts of Clanwilliam Division. It is the best Native tea in the Colony. Specimens of the tea plant.

(2.) **Flea Bush (Bulderjal).**

A species of mint used as an antidote to fleas.

(3.) **Specimen of Bushman Grass Seeds.**

The most nutritious Grass in the Colony for fattening oxen. After rain this Grass springs up and seeds in a fortnight.

(4.) **Zybosh or Silk Bark.**

A forest tree, height 12 to 15 feet, diameter 7 to 12 inches. The bark and leaves when broken show numerous fine silk-like white threads. Grows best in rocky situations beneath other trees: found in many parts of the Colony.

113. Ladies of George **GEORGE.**

Ferns, 50 to 60 varieties, Pressed and Mounted, Classified and Named.

114. **Phillip, Miss Mary Ann.** . . . SEA POINT, CAPE TOWN.
Cape Grasses. Everlasting Flowers.

115. **Hobson. S. B. and Bros.** . . . EBENEZER, GRAAFF-REINET
(1) Specimen of curious Plant known as the Finger-pol.
(2) The Noorse Doorn (thorn), a Stock Food Plant.
(3) The Candlebush.

A shrub used for burning the thorns of the Noorse Doorn before the sheep are turned in amongst it. It is a thorny geranieous plant and when dead dries up to a mass of resinous woody twine, which when lighted flames like a torch.

116. **Templeman, Robert A.** CAPETOWN.
Articles made of Everlasting Flowers.
See Exhibit of Flowering Plants.

117. **Von Schade, Jessie Charlotte (Mrs.)** . . . WYNBERG.
Silver Leaves, pressed, and articles manufactured therefrom.

CEREALS.

119. **Cape Commission.**
Wheat, Barley, Rye and other grain from various parts of the Colony.
120. **Attwell & Co.** , CAPETOWN.
Samples of Wheat, Flour and Biscuits of various kinds.
121. **Brown, C.** KING WILLIAM'S TOWN.
White Mealies (Indian Corn) 1 bag.
Yellow Mealies, 1 bag,
122. **Cloete, Jan.**
Wheat, 1 bag.
123. **Langford & Scott.** . . . ARTOIS MILL, near CERES.
Flour, 5 bags.
124. **Elizabeth Steam Mills Co.** . . . PORT ELIZABETH.
Flour, superfine silk dressed, 5 bags.
Wheat, from which above flour is produced, 1 bag.

- 125. Rabie, P. & P.** **WORCESTER.**
 Malting Barley, grown from imported seed, 3 bushels.
 Part of crop of 1,600 bushels grown in valley ground; cut end of November, 1885. Yield, 25 bushels to the acre.
- 126. Russau, Brothers.**
 Wheat, 1 bag.
 Rye, 1 bag.
 Peas, 1 bag.
- 127. Stephan, Brothers.** **CAPETOWN.**
 Rye from the Saldanha Bay District. Sample grown from Cape seed.
See also exhibits of guano and salt.

PRESERVED FRUITS, JAMS, &c.

- 129. Berlin Mission.** **AMALIENSTEIN, LADISMITH.**
 Dried Fruit, grown at the Mission Station and prepared by the Natives, consisting of Raisins, Figs, Apricots, and Apricot Peaches, Peaches, Quinces, Apples and Pears.
- 130. Beyers, J. M.** **STELLENBOSCH.**
 Fruits, preserved, 12 jars.
- 131. Brookes, Alfred.** **PORT ELIZABETH.**
 Hotch-Potch, made from the choicest Colonial fruits.
- 132. Brunette, Mrs.** **CAPETOWN.**
 Chutney and Pickles.
- 133 Dyer, John E., M.D.** **CAPETOWN.**
 Cream Tartar Fruit (*Avansonia digitata*).
- 134. Glass Brothers.** **GRAHAMS TOWN.**
 Jams and Jellies from Colonial Fruit.
- 135 Hill, J. J. and Co.** **CAPETOWN.**
 Cape Gooseberry Jam, in 1 lb. tins.
- 136. Kelly and Co.** **PORT ELIZABETH.**
 Jams and Preserved Fruits.
 Most of these jams are manufactured from fruits comparatively unknown in England.

137. Volsteedt, J. P. CAPETOWN.
Fruits, Cape, preserved whole in syrup.

138. Rigg, Christopher. PORT ELIZABETH.
Desiccator for drying fruit.
See Exhibit of Honey.

RAISINS.

139. Du Toit, Andries Hendrick, Junr. HEX RIVER, WOR-
CESTER.

Raisins (a) 500 lbs. stalk ; (b) 500 lbs. loose.

Grown at Over Hex River, in the Division of Worcester, on Karoo soil, about 5,000 vine-sticks to the acre. The annual production is from 15,000 to 20,000 lbs. Gathered in March.

140. Hamman, Johannes N. WORCESTER.

Raisins (a) 500 lbs. stalk ; (b) 500 lbs. loose ; (c) 50 lbs. sultanas ;
(d) 50 lbs. currants.

Grown in Worcester district, on Karoo soil. There are 5,000 vine-sticks to the acre. About 30,000 lbs. weight of raisins are produced annually : should there be sufficient demand, the quantity could be doubled. Gathered in March.

141. Le Roux, D. B. BADEN, MONTAGU.

Raisins (a) 500 lbs. stalk ; (b) 500 lbs. loose.

Grown in the Montagu district.

142. Marais, Pieter Willem, WAKKERSTROM DISTRICT, ROBERTSON.

Raisins (a) 500 lbs. loose ; (b) 125 lbs. stalk.

Grown in Wakkerstrom, on Karoo soil. About 4,000 vine-sticks to the acre. 20,000 lbs. weight produced annually, but, should there be sufficient demand, 100,000 lbs. weight could easily be produced. Gathered in March.

143. Rabie, Dirk de Vos. BRAK VLEY, WORCESTER.

Raisins (a) 500 lbs. stalk ; (b) 500 lbs. loose.

Grown at Brak Vley, in the division of Worcester, on chalky Karoo soil, about 3,300 vine-sticks to the acre. 50,000 lbs. weight produced annually. Gathered in March and April.

HOPS.

145. Cloete, D. NEWLANDS, CAPETOWN.
Hops, grown at Newlands.

146. Letterstedt and Co. NEWLANDS, CAPETOWN.
Hops, grown at Newlands.

VEGETABLE WAX, &c.

147. Hall, Dr.

Berry Wax, from berries of *Myrica cerifera* (3 jars).

148. Zinn, H. P. WELGELEGEN, HUMANSDORP.

Gum-wax, from the Cape wax-berry myrtle, of which there are three species, viz. :—*Myrica Cordifolia*, *M. Serrata*, and *M. Quercifolia*.

The sample is from berries from the Lower Zitzikamma, in the district of Humansdorp. The plants are found on several farms, and cover about 2,000 acres. The quantity collected weighs about one ton, and larger quantities can be gathered should there be any demand. It is used by the farmers for making soap and candles, and is prepared as an ointment for dressing wounds.

- 149 Nucleus Soap and Candle Works PORT ELIZABETH.

(1) 100 lbs. Primrose Soap; (2) Ganna Bush, used in making Boer Ash; (3) Boer Ash, produced from the Ganna Bush, and used for making Boer Soap; (4) Boer Soap; (5) Colonial-made Silicate of Soda, used for adulterating soap; (6) Liquor extracted from Boer Ash; (7) Candles made from the South African berry, or vegetable-wax; (8) Berry-wax, in its crude state; (9) Bush from which wax is extracted; (10) Sample of Wax naturally bleached; Sample of Wax artificially bleached; (11) Boer Soap, made by Dutch farmers.

COTTON.

- 150 Holdstock, E. W. EAST LONDON.
Cotton.

See also Exhibit of Silk.

TOBACCO.

151. Mason, G. J. BALFOUR, STOCKENSTROOM.

Tobacco, grown in Stockenstroom district.

10 lb. Case, 3 dozen Packets cut. Fair Sample of Crop grown on an area about 100 yards square, which produces about 3,700 lbs. weight of good leaf. The past season was unfavourable, but the present crop promises well, and there can be no doubt that the district is well suited for growing tobacco, large quantities of which can be produced if a suitable market can be found for leaf.

152. Oudtshoorn Chamber of Commerce. . . OUDTSHOORN.

Tobacco, as follows :—

1. Exhibited by S. J. Van Wyk. Vergelegen, Cango.
Tobacco Leaves : (1) Sumatra, 13 oz. ; (2) Cape Shiny, 6 lbs. ; (3) Cuba, 8 lbs. 4 oz. ; (4) Golden Leaf, 8 lbs. 8 oz. ; (5) Manilla, 9 lbs.
Shown in a polished kerswood glass case made by James Gardiner for exhibition, from Colonial wood grown in the neighbouring districts of George and Knysna.
2. Exhibited by Hendric S. Schoeman . Schoeman's Hoek, Cango.
(1) Leaf Tobacco, known as "Blink Blaar," of 1886 crop, 24 lbs. ;
(2) Cape Shiny Leaf Tobacco (1885 crop), tied in bundles, 20 lbs. ;
(3) Cape Shiny Leaf Tobacco (1885 crop) tied in hands or docks.
3. Exhibited by William Schoeman Kombuis, Cango.
Ordinary Cape Leaf Tobacco of 1886 crop.
4. Exhibited by Hendric P. Schoeman . Schoeman's Hoek, Cango.
(1) Ordinary Cape Tobacco, 22 lbs. ; (2) White Burley (opened leaves), 4½ lbs. ; (3) White Burley (bundled), 1½ lbs. ; (4) Sumatra, 2½ lbs.
The White Burley and Sumatra have been tried this year for the first time by this Exhibitor.
5. Exhibited by Andries Fourie . Van Wyks Kraal, Oudtshoorn.
Cape Leaf Tobacco, 1885 crop, 23 lbs.
6. Exhibited by Johanes Otto Oudtshoorn.
Ordinary Cape Leaf Tobacco, 1886 crop, 24 lbs.
7. Exhibited by David H. Botha Kruis River, Cango West.
Cape Leaf Tobacco, bundled, 1886 crop, 16 lbs.
8. Exhibited by J. P. du Plessis Hazenfacht, Oudtshoorn.
"Blink Blaar," opened leaves, 1886 crop, 11 lbs.
9. Exhibited by C. J. Strydom Kruis River, Cango West.
(1) Cape Leaf Tobacco, small hands, 16 lbs. ; (2) Cape Roll Tobacco, 4 lbs.
10. Exhibited by Johanes Le Roux Camnasie, Oudtshoorn.
Ordinary Cape Leaf Tobacco, 21 lbs.
11. Exhibited by G. J. Cellarius Vlackte Plaats.
Kentucky Leaf Tobacco (opened leaves), 21 lbs.
12. Exhibited by Carl Fowrie Camnasie, Oudtshoorn.
Cape Leaf Tobacco, 12 lbs.
13. Exhibited by A. A. Pocock Queen's Street, Oudtshoorn.
(1) Sweated Cango Leaf, 13 lbs. ; (2) Plain Cape Leaf, 14 lbs. ; (3) Cut Cango Tobacco, in packets, prepared from the pure leaf, 58 lbs.

153. Pocock, A. A. OUDTSHOORN.

Tobacco.

154. Prince, Vintcent and Co. MOOSEL BAY.

Leaf Tobacco. Grown in the district of Oudtshoorn, where it may be cultivated to an unlimited extent.

This Tobacco is capable of great improvement: hitherto little care has been bestowed upon its cultivation and less upon its preparation for market.

**155. Van Wyk, Stephanus Johannes . . . VERGELEGEN,
OUDTSHOORN.**

Tobacco, four samples—

(1) Cuba, dark colour, strong, suitable for cigars. Average number of leaves on plant 12 to 18; (2) Manilla, light colour, mild taste, suitable for cigars. Leaves on plant 12 to 18; (3) Golden Leaf, light yellow, mild taste, suitable for cigarettes and light smoking tobacco. Leaves on plant 12 to 18; (4) Shiny Leaved or South African Tobacco, dark colour, strong, suitable for strong smoking tobacco. Leaves on plant 18 to 20.

Grown at Vergelegen, in the District of Oudtshoorn, on a plot of land between Mountain and Karoo, formerly covered with oak and poplar trees, 16,000 plants cover about 20,000 square yards.

The suckers are never allowed to grow beyond 6 inches in length and are consequently taken off weekly. The whole stalks are gathered but before cutting the stem is split in two pieces from the top to the lowest leaf and allowed to dry. After cutting, the tobacco is dried beneath oak trees and not in houses. Horse ash and leaf manure is used.

156. Joseph and Gluckstein . . . VICTORIA WEST.

The process of manufacture of Cape Tobacco.

WINES AND SPIRITS.

157. Cape Commission,

- (1) A selection of Wines made from the following grapes, Stein, Green Grape, Muscatel, Hanepoort, and Pontac. These Wines have been specially prepared under the superintendence of Baron Von Babo, Expert to the Cape Government.

District.	Name of Wine Grower.	Description of Wine.	Vintage.	Number of Hogsheads.
Paarl	P. C. le Roux	White Green Grape	1882	9
Goudini	P. Van der Merve	Stein Grape	1884	19
Montagu	R. Keet	Red Muscatel	1884	9
Paarl	P. C. le Roux	Green Grape	1884	3
Paarl	P. C. le Roux	Green Grape	1884	7
Constantia	S. P. Latagan	Hanepoort	1884	22
Montagu	R. Keet	Pontac	1884	5

- (2) Wine Spirits specially distilled by Mr. Van Es, under the direction of Dr. P. D. Hahn, Professor of Chemistry, at the South African College, Capetown.

All information respecting the Wines and Spirits can be obtained from Mr. Le Roux, Special Wine Commissioner appointed by the

Government of the Cape of Good Hope, at the office in the Exhibition. The Wines may be tasted at the General Bodega, in the Central Gallery, or at Messrs. Spiers and Pond's Refreshment Bar adjacent to the Cape Court.

(3) Vinegar.

(4) Argol.

158. Burger, A. P. **BADEN, MONTAGU.**
Wines from Montagu District.

159. Collison, Henry C. **CAPETOWN.**
Wines of various kinds.

160. Parkes, John J. **WHEATLANDS.**
Brandy.

160a. Paarl Wine and Brandy Co. **PAARL.**
Wines and Spirits.

161. Bosenberg, C. H. **CAPETOWN.**
Aromatic, Stomachic Bitters.

162. Le Roux, D.B. **BADEN MONTAGU.**
Wines from Montagu District.

162a. Marais, Peter **CAPETOWN.**
Cape Wines.

ARGOL.

Cape Commission.

Argol.

See under Wine and Spirits.

163. Sheldon and Co. **PRAAL.**
Argol 100 lbs.

MEDICINAL PLANTS, &c.

164. Cape Commission.

Collection of Medicinal Plants. Selected by W. Hammond Tooke, from the collections of—

Rev. G. Hettasch, Genadendahl Moravian Mission, Caledon.

Dr. Jacob Hanau, District Surgeon, Carnarvon.

Dr. E. B. Muskett, Hope Town.

Valentine Beyers, Onrust River, Caledon.

The Civil Commissioner, Ladismith.

J. Rose Innes, C.M.G., Under-Secretary for Native Affairs.

LIST OF MEDICINAL PLANTS.

(Pressed Specimens.)

From Rev. G. Hettasch, Genadendahl Moravian Mission, Caledon.

1. *Osmites dentata*, Cass. *Klein Bells*. Found on mountain sides.
- 1b. *Osmitopsis asteriscoides*, Cass. *Groot Bells*. Found along banks of streams.

Both are used in decoctions or preserved in spirits for colds and coughs. The *Osmotopsis* is impregnated with a great deal of an aromatic volatile oil, which, from its odour and taste, seems to contain camphor. Hence its virtues as an antispasmodic, tonic, and resolvent. In the form of infusion, it is frequently and advantageously employed in cough, hoarseness, and in diseases of the chest generally, and is said to be also very serviceable in flatulent colic. Infused in spirit, it acts as a powerful external remedy, and Thunberg relates that he has successfully cured paralysis with embrocations of the *Spiritus Bellidis*. It would be worth while to distil the essential oil, with which this plant abounds, and which, from its peculiarity, shows an affinity to cajuput-oil.

The *Osmites hirsuta*. Less., a plant common on the mountains of Fransche Hoek and Drakenstein, having a similar smell, is known in the Colony as *Van der Merve's Kruiden*.

2. *Agathosma virgata*, B. & W. *Bok Buchu*. Grows on mountain slopes.
Used for pulmonary complaints.
3. *Salvia aurea*, L. *Wilde Salie*. Grows in Ravines near water.
A sudorific.
4. *Dodonæa Thunbergiana*, E. and Z. *Ysterbosch*. A small mountain tree or shrub, common about Piquetberg, Worcester, and Clanwilliam, where it is called *Zand Olyf*. A decoction of the root is used as a slight purgative in fevers.
Used to promote the flow of the lochia.
5. *Pelargonium grossularioides*, Ait., var *pubescens*. *Rabas*. Grows in valleys.
Used as *P. grossularioides* (*Rabas*).
6. *Mentha* sp., probably *M. Sylvester's* var. *Kruizement*. Grows in valleys.
7. *Bubon Galbanum*, L. *Wilde Sellerie, groot (coarse)*.

This umbelliferous plant, which attains a height of from six to eight feet, and is found all over the Colony in moist places, or in ravines of mountains, is reputed amongst the inhabitants as an excellent diuretic, under the name of *Wild Celery*. A decoction of its leaves proves salutary in cases of dropsy, and has been even administered successfully in gravel. At times some resinous matter exudes from the stem, which, however, in its appearance, smell, and in every respect, greatly differs from the *Gummi galbanum*, the well-known drug of our dispensaries. Linnæus, in giving the name to this species, seems to have been led into a mistake, the real drug being derived from a different plant, a native of the North of Africa, and probably from a kind of *Ferula*.

7. *Bubon tenuifolium*, Sond. & B. *Wilde Sellerie, fyn (fine)*.

8. *Barosma crenulata*, Hook. *Buchu, Bergbuchu.*
(*Diosma crenata*, D. C.)

Native of the mountains of Hottentots' Holland, Stellenbosch, Drakenstein, Tullagh and Worcester.

The *Buchu leaves* have, as is well known become an article of export lately. Their principal medical effects are owing to their possessing a considerable quantity of an aromatic volatile oil, and to a particular very tenacious principle, called *Diosmin*, as also to a semi-resinous substance. They have a peculiar smell, and a slightly astringent, bitter taste. When used in the form of infusion, they promote perspiration. Hence their utility in chronic rheumatism, gout, and other diseases, caused by the sudden suppression of cutaneous action. They have been prescribed also in cholera morbus, and are very beneficial in diseases of the bladder, especially in chronic inflammation of the mucous membrane of that organ (catarrh of the bladder); also in hæmaturia, calculus, and in suppuration of the vesica, urethra, and prostrate gland. In increasing the secretion of urine, they impart to it their peculiar smell. They have also been given in dropsy; in fine, in all those cachetic and hydropical complaints, arising from suppression of the perspiration or urine. As a stimulant to the stomach, some practitioners have used the *buchu leaves* in indigestion; a sensation of warmth has accordingly been produced in that organ, and the appetite increased.

A bath of the *buchu leaves* is of service in rheumatism, and the *Buchu vinegar*, as also the *Buchu brandy*, are excellent embrocations in rheumatic pains, laxations, sugilations, sprains and contusions.

9. *Helichrysum crispum*, Less. *Hottentot's Kooigoed.* Grows in valleys.

Used in bathing water for colds.

10. *Helichrysum serpyllifolium*, Less. *Xaibosch.*

This species also appears to possess demulcent and emollient properties, and to be of service in the various diseases of the chest. It goes by the name of *Hottentot's tea*, and grows near the watercourses on the Cape mountains, has a pleasant smell, and is much liked by the coloured people, who infuse it as tea. Sometimes the *Helichrysum auriculatum*. Less., is used for the same purpose, and under similar circumstances. Used also for catarrh.

11. *Pelargonium grossularioides*, Ait. *Turkschei Nageltjies.* Grows by river banks and dry beds.

Used for hæmorrhage.

12. *Chenopodium murale*, L. *Mistreedi.* Also a river plant.

Used for colic and flatulence.

13. *Exomis axyrioides*, Fenzl. *Hondebosch.* Grows on waste exhausted land.

Used for inflammation.

14. *Stachys Aethiopica*, L. *Hedenih.* Grows along river banks and dry beds.

Boiled with sugar candy to a syrup, and used for whooping cough.

15. *Chironia baccifera*, L. *Bitterboschje.* Mountain plant.

Used for coughing and consumption.

16. *Chenopodium Vulvacea*. L. Vas. *Geniesboschje*. Grows in old cattle kraals.

The leaves crushed, are placed on fresh wounds.

17. *Hydrocotyle asiatica*, L. *Paarden voetje*. Grows in moist, shady localities, at watercourses and in the beds of empty rivers, throughout a great portion of the Colony. At the Genadendahl Mission Station the leaves are crushed, and the sap used with alum for sore mouths.

This small plant has been recommended in India as a remedy for leprosy, the local Government having authorised its use at the Leper Hospital. The use of this plant was discovered by Mr. Jules Lepine, of Pondicherry, and instantly communicated to the Madras authorities and the public. He was guided to his discovery by Dr. Boileau, of the Mauritius, who, himself suffering from this fearful disease had devoted himself to experiments with it.

18. *Malva parviflora*, L. J. *Kissibladere*.

Used as a febrifuge.

19. *Anagallis aroensis* L., var *coerulea*. *Mierpas*.

Boiled to a pulp, and placed on wounds to draw them.

20. *Chenopodium ambrosioides*, L. *Struik kruiden*.

The whole of this plant has a strong aromatic smell, caused by an ethereal oil which it contains, and a pungent, bitter taste. Its properties are antispasmodic, diaphoretic, and anthelmintic, and the best form for its administration is that of tea or infusion. Grows chiefly on waste grounds, under walls, by way-sides, or upon rubbish near towns and villages.

21. *Pelargonium triste*, L. *Kaneelbol*.

The scarlet-coloured root of this *Pelargonium* is somewhat astringent. If dried and pulverized, it is useful in diarrhoea and certain forms of dysentery, when purgatives have been previously given. The bulb is boiled, and the decoction used to alleviate pressure of blood. It has also been recommended as a vermifuge. Found on Table Mountain and at Genadendahl.

22. *Polygonum Serrulatum*, Leg. *Watergras*.

Grows in river-beds.

23. Specimen undeterminate, perhaps a composite. *Klaas Louw*.

Flowers boiled with sugar into a syrup and used as a vermifuge.

24. *Ruta Graveolens*. *Wynruit*.

Used to alleviate pressure of blood.

25. *Artemisia Afra*, Jay. *Wilde Als*, *Wormwood*.

The whole of the *Wormwood* (Alsem.) has a strong balmy smell, and a bitter, aromatic, but nauseous taste, owing to a green essential oil which it contains. The herb is tonic, antispasmodic, and anthelmintic, and very useful in debility of the stomach, visceral obstructions, jaundice, hypochondriasis, or similar evils, while its efficacy as a vermifuge is generally admitted. The best forms for using it are the infusion, the decoction, and tincture, the latter being preferred by the colonists. A strong infusion is used externally as a collyrium in weakness of the eyes, and the pounded leaves and stalks are employed as a discutient in oedema and sugillations.

26. *Melianthus Major*, L. *Kruidje Roer-mij-niet*.

Every part of this plant has a nauseous smell, whence it has received the Dutch name of *Kruidje roer mij-niet* (don't touch me plant). A decoction of the leaves is an excellent external remedy in tinea capitis, crusta serpinginosa,* necrosis, and foul ulcers. It is also useful as a gargle and lotion in sore throat and in diseases of the gums, and the bruised leaves, applied to ulcers, promote granulation. It is common in the Cape Flats, and other parts of the Colony.

* I am indebted to my friend, Dr. A. Brown, for the following practical remarks on the medical properties of this plant:—"For many years past, I have found the *Melianthus major* very serviceable in necrosis and foul ulcers, and its effect in promoting granulation is very remarkable. After cleaning the sores with the decoction, some of the boiled leaves are applied to the parts, and found to answer well. I have not only used it with decided benefit, but in many cases where the *materia medica* has failed me, or the degree of healing was not satisfactory, it has almost invariably succeeded. In carcinoma I have seen it applied with effect in cleaning the ulcers, and rendering their otherwise highly disagreeable odour less offensive. In indolent leprosy sores it can also vie with the other applications that we use in that intractable disease. I have tried it in tinea capitis with great effect, but in other affections of the skin it has as yet failed to satisfy me decidedly whether it did good or not. In cases where tinctura myrrhæ is recommended, I have found it a better remedy. In fact, I may say that in my practice it is almost daily used."—Puppe. *Floral Capensis Medical Prodrum.*

From the District Surgeon, Dr. Hanau, Carnarvon.

1. *Pteronia*, Sp. *Goliath*.

A bush growing on the mountain about two feet high. The flowers and leaves are used as a febrifuge also as a purgative.

2. *Galenia Africana*. *Youtrasbosch*.

Grows in the valleys about three feet high. Flowers and leaves used as a cure for diarrhoea.

3. *Pelargonium ramosissimum*. *Dasbosch*.

A bush growing in the mountains a foot high. The leaves used in amenorrhœa and dysmenorrhœa.

4. *Hoemax Massoni*. *Bitterhout*.

A bush growing in the mountains three to four feet high. Roots act as a purgative and sudorifice.

5. *Arthrosoleis polycephalus*. *Januarybosch*.

A bush about three feet high, growing on the plains. Used as a purgative and emetic.

6. *Pharmaceum*, Sp. *Wonderwortel*.

A plant growing in rivers and marshes three to four feet high. Root used in cases of consumption and dropsy and highly praised. It was tried, however, by Dr. Hanau, in the gaol hospital without effect.

From the District Surgeon, Dr. Woolby, Engcobo, Tembuland.

A. *Ranunculus pinnatus*. *Igangasana*.

Antiseptic. The juice of the stem and leaves is used by the Kaffirs for assegai wounds and sores of all kinds.

B. *Lichtensteinia interrupta*. *Inthlatu*.

The roots and leaves are used in the case of splenic fever (meet-ziekte). This plant has been the subject of an article in the *British Medical Journal*, by W. E. Stanford, Chief Magistrate of Griqualand East, and Dr. Woolby. A large sample has been sent to England to Messrs. Hanbury and Allen for experiment.

C. *Anchusa riparia* (?). *Nomacutyana*.

Leaves pounded and used as a salve for sores and wounds.

D. *Mundtia spinosa*. *Schildpad besjes*.

A decoction of the tops of the branches of this shrub, which is very common in the Downs, is used in atrophy, phthisis, &c., apparently with some effect, while the fruit, which is somewhat astringent in taste, is eaten by children and Hottentots, who call them *Schildpadbesjes*.

From the District Surgeon, Dr. E. Muskett, Hopetown.

E. 114. *Cassia obovata*, var *obtusata* (?). *Cape Senna*.

"This plant is exceedingly abundant in the Hopetown district. It has, I believe, been identified at Kew as *Cassia obovata* one of the species yielding the senna of commerce. If it be that species it must be a distinct variety, probably *C. obtusata* of works on *Materia Medica*, which occurs I believe chiefly in the Western parts of Northern Africa. Should it prove of commercial value, there is unlimited supply easily collected as it is to be found plentifully through the greater part of the Hopetown district, and adjoining parts of Griqualand West, and probably through the whole of the Kalahari desert, and neighbouring country. There would be no difficulty in its collection."—Edwin B. Muskett, M.D., M.C. Aberd.

(Dried Specimens, in Bundles.)

From Mr. Valentine Beyers, Onrust Rivier, Caledon.

1. *Pelargonium anceps*. *Wild Roode Rabassam*.

This species, which grows plentifully along the watercourses in the Cape and Swellendam districts, is a great favourite with the Malays, who call it *roode Rabassam*, and pretend that a decoction of the herb cures suppression of the catamenia, and promotes parturition and abortion.

2. *Diosnia* var. *Duine Buchu*, *Down Buchu*. *Vide supra*, s.v. *Barosma crenulata*.3. *Diosnia* var. *Hottentot Buchu*. *Vide supra* s.v. *Barosma crenulata*.4. *Sium capense*. *Tandpynwortel*, or, *bosch*.

In marshy spots near Zeekoe Valley, in the bed of the Zwartkops River, and in similar localities. Flowers February and March.

The root of this umbelliferous plant, called *Tandpynwortel* (Toothache-root) by the colonists, is renowned for its allaying toothache when held in the mouth or chewed.

5. *Bubon galbanum*. *Wild Celery*. *Vide supra*.6. *Osmitopsis asteriscoides*. *Bells*. *Vide supra*.7. *Solanum niveum*, Thunb. *Geneesblaren*.

The leaves of this *Solanum* are smooth on the upper and woolly on the lower surface. The application of the latter to foul ulcers, cleanses them, and a cure is afterwards effected by applying the upper surface. Hence their Dutch name of *Geneesblaren*. The fresh juice of the berries and leaves, when formed into an ointment with lard or fat, are also in use amongst the farmers for the same purpose.

8. *Artemisia afra*. *Wilde als.*, *alsem.*, *Wormwood*. *Vide supra*.9. *Mentha capensis*. *Kruisement*.

Like other *Mints*, this one contains an ethereal oil, which is sharp and bitter to the taste. It grows plentifully in moist mountainous regions,

and is valued as a most excellent antispasmodic and carminative. It is used in the form of infusion in flatulent colic, meteorism, cardialgia, hysteria, and amenorrhœa, and externally to sugillations, glandular swellings, indurations or similar complaints.

10. *Salvia aurea*. *Wild, or, Golden Sage, Wilde Salie. Vide supra.*
11. *Salvia africana* L. *Hottentot Sage.*

Like those of the common Sage, the leaves of this species (known as the *Hottentot Sage*) are fragrant, astringent, and bitter. They possess nearly the same medical properties as the *Salvia officinalis*, and are used in the same way and under similar circumstances.

12. *Ballota nigra*. *Katte Kruiden (Cat herbs).*

This plant, the whole of which is covered with soft hairs, bears an affinity to, and possesses the medical properties of the European Horehound (*Marrubium vulgare*. Lin.) It has an aromatic, bitter taste, and as a tonic, discutient, and expectorant, decoctions and infusions of its leaves are often successfully employed in chronic pulmonary affections.

13. *Leonotis Leonurus*. R. Br. $\left\{ \begin{array}{l} \textit{Wild Dagga, Umfincafincaane (Kaffir).} \\ \textit{Wild Hemp.} \end{array} \right.$

This plant, the *Wild Dagga*, is, on account of its beautiful flowers, a fine garden ornament. It grows wild in the sandy Cape Flats, and often at the roadside. It has a peculiar scent and a nauseous taste, and seems to produce narcotic effects if incautiously used. It is employed in the form of decoction in chronic cutaneous eruptions, and may be tried even in cases of leprosy. The usual dose is a wineglass-full three or four times a day. The *Hottentots* are particularly fond of this plant, and smoke it instead of tobacco, and take a decoction of its leaves as a strong purgative; they likewise give it as an emmenagogue in amenorrhœa. In the Eastern districts, the *Leonotis ovata* is used for the same purpose.

L. Leonurus is used as an antidote to snake-bite. It is the plant from which European practitioners have made their celebrated preparations. It is a tall plant, growing to the height of 4 to 6 feet. Its leaves are oblong, rather lance-shaped, and it may easily be recognized by the numerous whorls on its stem of light-red or orange-coloured flowers. The Kaffir name *umfinca-fincaane* is taken from the sugar-birds sipping the sweets from the bottom of its long trumpet-shaped corolla. Before the mouth of the corolla opens, which it does when the stamens are mature, the nectar is intensely bitter, but at the moment of opening the sweetness is developed. It is the *Fuigo* tribal remedy, and has been known to the *Fuigo* best doctors for ages. The Kaffir national remedy is not this plant, but the *Teucrium Africanum*.

(Andrew Smith, M.A. A contribution to S. A. Materia Medica, Lovedale, 1885.)

14. *Ricinus communis*. *Castor Oil Plant.*

It is scarcely necessary to say much of a remedy so universally known as the one derived from this plant. As a mild purgative, the *Castor-oil* excels all other preparations, and is daily prescribed in all parts of the globe. It is desirable, however, that instead of importing this medicine, the colonists should prepare it themselves for exportation to those countries where this useful plant does not grow spontaneously.

15. *Viscum capense*, Lin. *Vogel-eend.*

A parasitical plant growing on the stems of several species of *Rhus* and *Euclea* in most parts of the Colony. In its appearance and properties it is nearly allied to the European Mistletoe. Its stems are mucilaginous and a little astringent. These are employed as an antispasmodic in cases

of epilepsy in children and young females where the bowels are loose, and when the disease is just commencing. It has also been recommended in St. Vitus's dance, asthma and similar complaints, and is prescribed in the form of a powder or decoction.

16. *Cissus (Vitis) Capensis*. *Wild vine*.

An excellent remedy for piles, lumbago, and dysentery. Used in the form of a decoction.

17. *Mohria thurifraga*, Sw. *Pi-kees bosch, Brandbosch*.

This fern grows abundantly on the Cape mountains. The plant, when bruised, is fragrant and smells of *Olibanum*. In some parts of the Colony, the dry leaves are pulverised, and with fat made into an ointment, which is cooling, and very serviceable in burns and scalds.

From Rev. G. Hettasch, Moravian Mission Station, Genadendal, Caledon.

18. *Osmites dentata*. *Klein Bels*. *Vide supra*.

19. *Agathosma virgata*. *Bok Buchu*. *Vide supra*.

20. *Salvia aurea*. *Wild or golden sage*. *Vide supra*.

21. *Dodonaea Thunbergiana*. *Yster Bosch*. *Vide supra*.

22. *Pelargonium grossularioides*, var. *rubescens*. *Rabus*. *Vide supra*.

23. *Mentha* sp. prob. *sylvestris*. *Kruisement*. *Vide supra*.

24. { *Bubon galbanum*. *Wild celery, fine*. *Vide supra*. }
 { *Bubon termifolium*. " *coarse*. " }

25. *Barosma ovata*. *Berg Buchu*. *Vide supra*.

26. *Helichrysum crispum*. *Hottentots Kooigoed*. *Vide supra*.

27. *Helichrysum serpyllifolium*. *Xaibosches, Hottentots tea*. *Vide supra*.

28. *Pelargonium grossularioides*. *Turksche Nageltjes*. *Vide supra*.

29. *Artemisia afra*. *Wilde als, alsem wormwood*. *Vide supra*.

30. *Leonotis ovata*. *Klip Dagga, Makke Dagga, Tame Dagga*. Has similar properties to the *Leonotis Leonurus*, but inferior. Grows on hills.

31. *Cyperus*, sp. *Kalmus*.

Used for fever and stomach complaints.

32. *Rafnia amplexicaulis*, Thbg. *Zoethout*.

Used for spasms.

33. *Viscum capense*. *Vogel eend*. *Vide supra*.

34. *Psoralea*, sp. *Guerison*. Grows on mountain soil.

Used for chills.

35. *Polygonium*, sp. *ansemilatum* (?) *Lidjes gras*. Grows in water.

Used as *psoralea*.

36. *Artemisia afra*, var. *Fijne als*.

Used for strangury and hæmorrhoids.

37. *Mundtia spinosa*, D.C. *Schildpadbesjes*. *Vide supra*.

38. *Mesembryanthemum edule*, L. *Zuur vijgen, sour figs.*

Few South African plants are so much in domestic use as this species and *Mesembryanthemum acinaciforme*. Lin., both of which are common in the sandy tracts of the Colony. They are astringent and sourish in taste, on account of the acidulated alkaline salt with which they seem to be impregnated. The expressed juice of the succulent leaves, taken internally, checks dysentery, and acts as a mild diuretic; while it is also, for its antiseptic property, used as an excellent gargle in malignant sore throat, violent salivation and aphthæ, or in the form of a lotion in burns and scalds. At the Cape these plants are called *Hottentots vijgen* (Hottentot-fig.) The fruit is eatable, and used for preserves.

From the Civil Commissioner, Ladismith.

39. *Barosma crenulata*. *Buchu. Vide supra.*40. *Occinium Burchellianum*, Bk. *Timmie, Thyme. Vide supra.*41. Undetermined sp. *Kamfer (camphor) Bosch. Vide supra.*42. *Dodonæa Thunbergiana*. *Yster bosch. Vide supra.*43. *Leonotis ovata*. *Klip Dagga. Vide supra.*44. A composite, undetermined. *Klaas louw. Vide supra.*45. *Salvia* var. *Katte Kruiden. Vide supra.*

Used boiled with "Klaaslouw," and Ysterbosch for inflammation of stomach.

46. A composite undetermined. *Steen kruiden.*

Dried and used as snuff to stop bleeding at the nose.

47. *Conyza ivcæfolia*. *Bakoven bosch.*48. *Leyssera gnaphaloides* L. *Teering thee, geel-bloemetjes tee.*

When pounded or rubbed with the fingers it gives an agreeable scent, and the infusion has a pleasant sweetish taste. It is emollient, and for that reason is highly recommended in catarrh, coughs, and even consumption.

49. *Mentha sylvestris*. *Kruizement. Vide supra.*50. *Artemisia afra*. *Wilde als. Vide supra.*51. *Cheironia baccifera*. *Vuilziekte bosch.*

Used when syphilitic sores make their appearance.

52. *Eriocephalus umbellulatus* D.C., *Roosmarijn, Wild Rosemary.*

This shrub inhabits the mountainous parts of the Colony, and has received its Colonial name on account of its smell, which somewhat resembles Rosemary. According to Thunberg it is diuretic, and used by the farmers and Hottentots in various forms of dropsy.

53. *Melanthus comosus*. *Kruidje roer mij niet. Vide supra. Melanthus major.*54. *Solanum tomentosum*. *Dortel appel.*

Used for Syphilis.

55. *Exomis axyrioides*. *Honde bosch. Vide supra.*56. *Euclea undulata*. *Kwaarie bosch.*

Used for coughs. The fruit is a red berry, known as guarri brsjes, is edible.

57. *Salvia rugosa*. *Wilde Salie*. *Wild sage*. *Salvia aurea* and *S. Africana*.

58. *Pentzia virgata*. *Karoo bosch*. *Vide supra*.

59. *Elytropappus rhinocerotis*, Less. *Rhinosterbosch*.

A bush, called *Rhinosterboschjes*, which covers immense tracts of waste land in the Western districts. The whole of this shrub is bitter and resinous. The tops of the branches, when infused in wine or brandy, furnish a superior kind of stomachic bitters, which have a green colour, and are frequently used as a tonic in dyspepsia and other complaints arising from impaired digestion. The tops are also given in powder to children affected with diarrhoea.

60. *Mohria thurifraga*. *Vide supra*.

61. Undetermined sp. *Bush tea*.

From J. F. Sewell, Knysna.

62. *Ricinus communis*. *Castor oil seeds*. *Vide supra*.

From Clanwilliam, per T. Bain, C.E.

63. *Hyænanche globosa*, Lamb. *Wolvegift (wolf's poison)*.

Though the fruit of this shrub (*Wolveboon*) has not been introduced into the *Materia Medica* of the Cape, yet it deserves particular attention. It is highly poisonous, and its four-celled nuts, when pounded, are used to destroy hyenas, or other beasts of prey, and seem to contain *Shrychnium*. This fatal bush is confined to a single locality, the so-called Gift-berg (Poison Mountain), in Clanwilliam.

From Dr. E. B. Muskett, District Surgeon, Hope Town.

64. *Cassia obovata*. *Cape senna leaves*. *Vide supra*.

From Dr. C. F. W. Rochow, District Surgeon, Peddie.

65. *Leonotis mollis*. *Barmagil hout* or *ipecacuanhabosch*.

Grows plentifully in the Peddie district.

Very much used with certain results against snake bites, (cf. *Leonotis leonurus* and *L. ovata*.) Supposed to be the substantial principle in Croft's tincture. Contains a great quantity of *Ipecacuanha*. The tea made therefrom is used as a general tonic and against chest affections. The alcoholic extract of leaves gives a splendid liniment used for rheumatism.

66. Undetermined sp. *Spanioel Bosch*.

Tea from the leaves is used for syphilis.

67. *Teucrium capense*. *Gall Bosch*.

Used for gall sickness.

68. *Solanum nigrum*, Lin. *Nass Gall*. *Nightshade*.

The common nightshade grows wild in almost all parts of the world. It has a nauseous smell, and is slightly narcotic. In South Africa the expressed juice of the herb, and the decoction, mixed with fat and wax are often successfully used in cleansing and healing foul ulcers. A good substitute for vegetables much used by the natives.

69. Undetermined sp. *Loogbosch*, or, *Soap bush*.

The natives make soap from the ashes.

70. *Monsonia ovata*. Cuv. *Keita*.

The *Keita* of the Hottentots. The root and herb of this plant are very astringent, and used with great success in dysentery. It grows abundantly in the district of Uitenhage and Peddie. The tea made therefrom is used among the Fingoes to promote abortion.

71. *Lippia asperifolia*. Rich. (?)

Smoked for asthma with good results.

72. *Sansievia thyrsiflora*. (?)

Not uncommon in forests and on Karroo-like hills between the Zwartkops and Boesjesman Rivers (Uitenhage). Flowers in December and January. In the Eastern districts, the fleshy root of this plant, when boiled, is made use of internally in piles, and is called *t'Kay* by the natives. Out of the root a splendid healing ointment is made for healing ulcers and sore places. The leaf gives a strong fibre; birds use it for their nests.

73. *Pelargonium reniforme*. Bot. Mag. (?)

The root is a certain cure for dysentery, containing a very strong astringent.

74. *Helichrysum pedunculare*. D.C. (?)

The leaves are used as a healing plaster on the white side, and as a drawing plaster on the green side. Natives use it to heal the wounds made at circumcision.

75. *Mentha sylvestris*. Linn. *Mint*.76. *Helichrysum quinquenerve*. Less. *Bushman tea*.

Used as a substitute for China tea.

77. *Cassia mimosoides*. L. *Hottentot tea*.

Used as a substitute for China tea.

78. *Artemisia afra*. *Wilde Als*. *Vide supra*.

Tea used as a tonic to purify the blood.

79. *Helichrysum crispum*. *Hottentots Kooigoed*.

Used for syphilis.

80. *Datura stramonium*. L. *Stinkblaren*.

This common weed, originally a native of America, but now naturalized in most parts of the civilized world, is well known to Englishmen as the *Thorn-apple*, so named on account of its spiny fruit. Having a foetid, nauseous smell, it is called *Stinkblaren* by the Cape colonists. Every part of this plant is highly narcotic, and pharmaceutical preparations made from it require, in their administration, the greatest care and circumspection. In South Africa, the fresh warmed leaves of the plant, or the vapour of an infusion, are successfully used as a sedative in violent pains, caused by rheumatism (*zinkens*) or rheumatic gout. In the shape of poultices also they are applied to carcinomatous ulcers, and it is said that the smoking of the dried leaves affords great relief in spasmodic asthma.

81. *Piper capense*. L. *Peperbosch*, *Boschpeper*.

The dense forests of Swellendam and George produce a kind of pepper (*Boschpeper*), which partakes of the properties peculiar to the genus. The berries have a hot, pungent taste, and an aromatic smell, and, infused in spirits, yield a tincture which is prescribed as a stomachic, stimulant, and carminative in indigestion, flatulency, and colic. In appearance and taste they greatly resemble the cubebs, and very likely possess similar virtues.

From Kaffraria, per J. Rose Innes, C.M.G., Under Secretary for Native Affairs.

82. *Teucrium africanum*. *Gallbosch, Podderklawo Ubuhlungu*.

"This is a dark green plant, with a leaf three-toed like a frog's foot—hence its name—with small white labiate flowers. When an ox or a cow has died of *milt ziekte* the Kaffirs boil the flesh along with this plant, and believe they can eat it with impunity. There need be no doubt that this is a bacteria-killing plant, but it is a question whether the boiling or the plant has most to do with the disinfecting of the meat. It is the chief plant relied on by the Gcalekas as an antidote to snake-bite. The Kaffirs employ it in cases of bite by a puff-adder, *iramba*, and by a boomslang, *inyushu*. With small very venomous snakes, *Teucrium* and the *Wild Dagga* are used together. An infusion of the leaves is employed, if they can be had fresh; otherwise a tincture. The ammonia and other appliances would be the same as with the *Wild Dagga*, to which however it is probably decidedly inferior.

There is a small variety of *Teucrium*, rightly looked upon by the Kaffirs as a distinct species, of which they use an infusion for ophthalmia. Though it is not the principal plant for the purpose, *Teucrium* is also used for glands in horses. That the same plant should be used in ophthalmia, in glands, and in disinfecting *milt ziek* meat can proceed on one supposition only—that it has a germ destroying virtue."—Andrew Smith, M.A. A contribution to S. A. Materia Medica, Lovedale, 1886.

It is stated that the Ubuhlungu is used by Bushmen to poison their arrows. The full name is "*Ubuhlungu babatwa*," the poison of the Bushmen. (W. E. Stanford, C.M., Griqualand East.)

83. *Hysmalobium linguaeforme*. *Melkbosch*.

84. *Leonotis leonurus*. *Umfineafincane*. *Vide supra*.

From Dr. Woolby, District Surgeon, Engcobo, Tembuland.

85. *Lantana salviaeflora*. *Utywala bentaka (birds brandy)*.

"This is the plant from which a lotion is made for the cure of ophthalmia. It derives its Kaffir name from its seeds having the repute of intoxicating birds. An infusion of the fresh leaves is the best preparation, but they do not lose their virtue when dried, though some of the strength is lost. The value of this plant is in cases of infectious ophthalmia, and were bacteria and poison germs have been introduced, and the application produces at first burning pain. In cases where the eyes are inflamed from cold, or from anything similar, its application is purely mischievous. A skilled medical practitioner who had been experimenting with this plant, found curiously enough that one or two tea-spoonfuls of an infusion of its leaves, administered every two or three hours produced a marked benefit in cases of incipient bronchial affections."—Andrew Smith, M.A. A contribution to S. A. Materia Medica.

86. *Teucrium africanum*. *Ubuhlungu*. *Vide supra*.

87. *Aloe africana*. *Inthlaba*.

A decoction of the root is taken in cases of Liver complaint, &c. Also roasted and ground, and the powder rubbed into incisions where pain is felt.

The Cape Aloe are procured from several species of this extensive genus, so peculiar to South Africa. The *Aloe ferox* Lam., a native of Swellendam, is generally acknowledged to yield the best extract. That obtained from the *Aloe Africana* Mill., is almost equally good, but not so bitter, nor so powerful as a drastic. It is the produce of the Eastern districts, whence

large quantities are annually exported. The Aloe commonly used by the colonists is prepared from the *Aloe plicatilis*. Mill., whose extract is a much milder purgative, and much resembles the Barbadoes Aloe. It inhabits the mountainous range near the Paarl, Drakenstein, and Fransch Hoek. It is much to be regretted that the farmers do not take more trouble in purifying this valuable drug.

Beyers, V. T. ONRUST RIVIER, CALEDON.
Medicinal Herbs.

See under exhibit of Cape Commission.

Hettasch, Rev. G. GENADENDAL.
Medicinal Plants.

See under exhibit of Cape Commission.

165. Beck, J. H. Meiring, M.B., M.R.C.S., Ed., &c.

RONDEBOSCH.

Protexein, a white crystalline body derived from a species of *Leucodendron* (Nat. Order Proteacea), closely allied in chemical constitution to salicin and its derivatives. Protexeia is of great value in the treatment of local malarious fevers, and will doubtless become a valuable therapeutic agent.

166. Fletcher, E. C. KENTBURG, KING WILLIAM'S TOWN.
Croft's tincture for snake bite, made in Grahamstown.

167. Juritz, Dr. C. F. CAPE TOWN.

COLLECTION OF MEDICINAL PLANTS INDIGENOUS TO THE CAPE COLONY.

Leyssera gnaphaloides. *Geel bloemetjies tee.*

Much used in chest and lung affections, coughs and consumption.

Osmitopsis asteriscoides. *Groot Bels.*

Antispasmodic and tonic; used in colic hoarseness, &c. Containing a large amount of oil similar to camphor oil; hence it is a powerful external remedy.

Mesembryanthemum edule. *Zuur vijgen.*

The fruit eatable; used for preserves. The leaves are very succulent and astringent extolled as a gargle for sore throat, and used in various other diseases.

Salvia aurea. *Golden sage.*

A sudorific.

Myrica cordifolia. *Waxberry plant.*

An excellent kind of vegetable wax is obtained from this plant and made into candles.

Arclopus echinalus. *Platdoorn or siek troost.*

A very astringent root used as a substitute for sarsaparilla; very valuable in cutaneous eruptions.

Leonotis Leonurus. *Wilde Dagga.*

As a decoction in chronic symptoms, leprosy and other diseases. Narcotic; smoked by the natives.

Leonotis ovata. *Makke Dagga.*

This variety is chiefly used for smoking by the Hottentots, being very narcotic.

Viscum capense. *Vogel eend.*

Employed in epilepsy for children in St. Vitus' dance, asthma, &c.

Elytropappus Rhinocerotis. *Rhenoster bosch.*

The tops infused in spirits used as a stomachic bitter for impaired digestion, weak stomachs, &c.

Pelargonium anceps. *Roode Rabuseam.*

Employed by the Malays to promote parturition and abortion.

Cyclopia genistoides. *Honigtee.*

As an infusion in chronic catarrh, consumption, &c.

Mundtia Spinosa. *Schilpad besjes.*

Decoction made from this plant used in phthisis, atrophy, &c. Fruit eaten by natives and children.

Cassya filiformis. *Vrouwen haar.*

Employed for washing the head and destruction of vermin. Said to make the hair grow.

Lastrea athamantica. *Umcomocomo.*

The root used as a vermifuge especially in the case of tape worm.

Melianthus major. *Kruidjeroer mij niet.*

An excellent external remedy in tinea capitis, crusta serpigiosa, necrosis and foul ulcers. Also useful as a gargle and lotion in sore throat and in diseases of gums, and the bruised leaves applied to ulcers promote granulation.

Salvia Africana. *Wilde Salie, Wild Sage.*

Used similarly to *Salva officinalis*.

Bubon Galbanum. *Wild Celery.*

As a decoction in dropsy and gravel.

Protea Melliflora. *Sugar bush.*

From the flowers a syrup is obtained known as *Syr: Proteae*, (*Bosjes stroop*) excellent in coughs and pulmonary affections.

Ornithogalum albissimum. *Magermans bol.*

A kind of oxymel is made from this bulb, and used as a substitute for scilla in asthma, consumption, &c.

Acacia horrida. *Doornboom.*

From this tree the Cape Gum is obtained. Bark used in fevers and dysentery.

Drosma (Barosma) crenata. *Buchu.*

In cholera, dysentery, rheumatism, as a stomachic.

- Cape Gum.
Sample used in commerce.
- Cape Tea.
Sample used here either as a substitute for or with China Tea. Price 4d. to 6d. per lb.
- Cape Wax.
Sample first melting.
- Rudix Calami Capensis. *Cape Sweet flag.*
- Quercus Capensis. *Cape Oak Shrub.*
- 168. Leinberger & Co.** PORT ELIZABETH.
14 lbs. Buchu Leaves from the Hermansdorp District and Uitenhage.
This Buchu is not so strong in flavour as the Swellendam Buchu, but is very abundant.
- 169. Prince, Vintcent & Co.** MOSSEL BAY.
Aloes, from Districts of Mossel Bay and Riversdale.
- 170. Shaw, Jesse** FORT BEAUFORT.
Colonial Medicinal Preparations.
- 171. Woolby, Dr.** TRANSKEI.
Medicinal Plants.
- 172. Parent, D. L.** CAPETOWN.
Medicinal Plants.

WOODS.

173.—Forest Department, Cape Colony.

(1.) WOODS AND FORESTS OF CAPE COLONY.

Introduction to Descriptive Catalogue.

A descriptive catalogue of Cape timbers would be incomplete without some sketch of the forests in which they grow. The woods described may be classified as follows:—

1. Woods of Knysna forests.
2. Woods of Eastern forests.
3. Woods of Western and Northern divisions.
4. Naturalised and Introduced Trees.

Knysna Forests.—The forests usually known as the Knysna forests lie in the civil divisions of George, Knysna, and Humansdorp, on the

Southern Coast, between the ports of the Cape Town and Port Elizabeth. They have received more attention and are better known than any other forests in the Colony. In a warm, moist climate, watered by both the summer rains of the East and the winter rains of the West, facing a lukewarm sea, heated by the Agulhas current from the Indian Ocean, forest vegetation at Knysna attains a semi-tropical luxuriance. The stout Yellowwoods, *Podocarpus*, the lofty Black Ironwoods, *Olea laurifolia*, and the valuable Stinkwood or Laurelwood, *Oreodaphne bullata*, stand out from a tangled undergrowth, and hang festooned with creepers, many of which are extremely beautiful. The scene at once recalls descriptions of similar forests in the same latitude and climate in Brazil.

In the Knysna forests, wild elephants and buffaloes still roam in considerable herds, and are protected by law. These forests and the neighbouring Addo Bush, are the only localities in extra-tropical South Africa where the elephant is now to be found, though fossilised ivory and bones shew that this animal formerly existed in the forests of the Eastern districts and of the Transkeian Territories. In the dense Knysna forests, elephant tracks are frequently the only paths by which the forests can be visited, and the clearing of lines for systematic management forms an expensive item.

The Knysna forests have been so considerably reduced by alienations and by fires, that the area remaining under Government control is now estimated not to exceed 150 square miles. A large proportion of this area is comprised in the virgin forests of Tzitzikama, Humansdorp division, which hitherto inaccessible, are now being opened up, and a road through them, connecting Knysna and Humansdorp, has been recently constructed.

The great object of forestry at Knysna, besides the general aims of systematic working, is to restore and increase the proportion of the valuable Stinkwood, or Laurelwood, this being the only locality in the Colony where it grows naturally in any abundance.

Eastern Forests.—Eastward of Knysna forests, and of Port Elizabeth, lies a semi-desert tract of sand covered with Euphorbia brushwood, known as the Addo Bush. Further East, occupying a low range of sand hills near the coast, are the Alexandria forests. Though at no great distance from Knysna, and in a somewhat similar but drier climate, they present at once the characteristics of the Eastern forests. Stinkwood is here unknown, and Sneezewood, *Pteroxylon utile*, formerly very abundant and of large size, is still represented in the younger stages of growth. Two woods, Septu, *Halleria Elliptica*, and Kajatenhout, or Cape Teak, *Atherstonea decussata*, are abundant in the Alexandria forests, and rare or unknown elsewhere. The forests of Bathurst (Port Alfred) com-

monly called the Kowie Bush, lie adjacent to those of Alexandria, and possess similar characteristics.

North-eastward of Bathurst are the more important forests of East London, containing the boxwood recently brought to notice, and not known to exist in any other forests in the Colony. Here also are found two other unnamed species, likely to be of importance in the future, viz., Unzumbit, or Umtiza, and Bogwood, or Umcobèza.

These constitute the Eastern Coast forests. For the most part they are of a scrubby character, attributable to a reckless and unsparing use of the axe. Under strict conservation, the felling of all timber or reserved trees is now prohibited in these forests.

The Eastern mountain forests are of a totally different character. The Perie and Amatola mountains north of King William's Town, contain high timber forests of the finest descriptions. The Perie, the lower and more southerly of these two ranges, rises from an elevation of about 1,500 feet above sea-level to 3,500 feet in the Mount Kemp and Elinor mountains. The Amatolas rise from 2,500 feet at Stutterheim to an elevation of 6,300 feet in the Hogsback Peak. The Perie range is the best wooded, and the forest area now in process of survey, is estimated at 50 square miles. The length of the main chain of the Amatolas is about 50 miles, with an area of demarcated forest estimated at 80 square miles.

Adding detached portions, the total area of high timber forests in the Eastern mountains, is brought up to 152 square miles, under direct Government control.

As in the Coast forests the most important wood in the mountain forests is Sneezewood. It has been similarly overworked, and in Government Reserves the felling of Sneezewood is prohibited.

The demarcation of these reserves has been rapidly proceeded with during the past three years, and the survey of blocks for systematic working has been commenced.

Western and Northern Forest Divisions.—With the exception of a small area of indigenous forest about a mile in extent at Swellendam, the Western and Northern divisions of the Colony contain no forests of importance. The Northern borders were doubtless at one time well timbered with *Acacia giraffae*, and with Thorn Tree, *Acacia horrida*, but as in many other portions of the Colony, the destructive practices of natives have left but scattered patches of woodland where formerly forests existed in all their natural luxuriance. Southward, in the mountains of Clanwilliam, are found the remains of the mighty Cedar forests, *Widdringtonia juniperoides*, and in the desert Karoo are scattered clumps of *Rhus viminalis*, Karreewood. The Cedar forests occupy the upper slopes of the Cederberg mountains above the winter range of snow. They are open and scattered, contrasting in this respect with the ever-green forests and scrubs found elsewhere in the Colony. Their

diffuse character, coupled with their isolated position, render demarcation difficult. Goats, fires, and the axe will in a few years probably extirpate these valuable forests.

Table mountain is flanked more especially on the Southern, or temperate side, with woodlands, composed mainly of three European species now naturalised in the Cape Peninsula for nearly two centuries. These are the Oak, *Quercus pedunculata*, the Stone Pine, *Pinus pinea*, and the Cluster Pine, *Pinus pinaster*. Dotted amongst the naturalised trees, and in a few places forming strips of pure forest, is the striking foliage of the Silver Tree, *Leucodendron argenteum*. The Silver Tree is only found indigenous near Table Mountain, and, planted in other parts of the Colony, is not hardy.

Among other trees naturalised in the Cape Peninsula are the Camphor Wood, *Laurus camphora*, and various species of *Eucalyptus*, and Australian Acacias called Wattles. A few strips of indigenous forest remain in gorges and inaccessible situations, but these are so small in area that it is not possible to say how far they represent the original forest flora of the Cape Peninsula—a small tract almost severed geographically from the great continent, and blessed with a mild temperate climate found nowhere else in South Africa.

Planting has been extensively undertaken on the slopes and summit of Table Mountain. Flourishing plantations of quick-growing Eucalypts have also been formed near the Railway; *Eucalyptus robusta*, *E. marginata*, and *E. globulus* being the species most largely utilised. A great variety of all the more valuable exotic timber trees has also been planted. The total area of these plantations up to date, is 4,360 acres, or about $6\frac{1}{2}$ square miles, and they are now progressing at the rate of about 1,000 acres per annum.

The average number of young trees reared annually in the nurseries is over a million, a large number being distributed gratis and at low rates to the public, in order to encourage tree-planting. A list of exotic plants raised at Tokai, will be found at the end of the Catalogue of Naturalised Woods.

The woods described in the following catalogue bear the names of the localities from which they come, and the order of description adopted is according to economic and forestal importance.

The collection of Knysna woods has been made by the Conservator, Captain Harrison, with the assistance of Mr. Rawbone, Assistant Conservator, stationed in the Tzitzikama forest, and of Mr. Harran, Inspector of Wood, Knysna. Mr. Fourcade has formed the collection of Knysna Forest Flora, and Mr. Cooper has collected the tree barks.

The woods from the Eastern forests are all marked "King William's Town," and have been collected by Mr. Hutchins, Conservator of Forests, assisted by Mr. Briscoe, Captain Ricketts,

Chief Ranger, East London, and Mr. Nightingale, Chief Ranger, Alexandria. Mr. Hutchins has also prepared the herbarium of Eastern forest Flora.

The naturalised woods have been collected by the Conservator of Forests, Western Division, Mr. Lister, with the assistance of Mr. Mather, Chief Ranger, Cape Flats.

For the collection of well-seasoned woods, illustrating forest growth in the Kowie Bush (Port Alfred), the Forest Department is indebted to Mr. R. R. Tathill, Resident Engineer of Harbour Works.

*Forest Department,
Capetown, 23rd February, 1886.*

WOODS FROM KNYSNA AND EASTERN FORESTS.

No. 1. — OREODAPHNE BULLATA.

Stinkwood, or Laurel Wood.

Exhibits:—

Knysna { 2 Large planks.
 { 2 Small do. taken from the roots.

King William's Town { 2 Small planks.
 { 1 do. round section.

Railway Department . . . Portions of 4 sleepers.

A tree with a generally misshapen crown, sometimes attaining a height of 50 to 60 feet, and a diameter of 4 to 5 feet. Bark smooth, of a silvery grey colour when young, scaly and almost black at maturity.

Stinkwood has little or no sapwood; some old trees shew nothing but a white streak inside the bark. The wood is very highly prized, being little inferior if not equal to Teak, in strength and durability. Three varieties are produced of this species, white, mottled, and black, owing probably to varying conditions of growth, rather than to any botanically specific difference.

Stinkwood is used for nearly every kind of work connected with building, wagon, and cabinetmaking. It has been used as sleepers by the Railway Department when great strength and durability were required, but has now become too valuable for the purpose.

Portions are exhibited taken up after 8 and 10 years wear. Stinkwood is much prized for furniture; it takes an excellent polish, and is not unlike walnut. Unfortunately this valuable tree has become scarce in the forests where it formerly abounded. In the virgin forests of the Tzitzikama, near Knysna, it is, however, very plentiful. It is also reported to abound in the Transkeian Territories lately annexed to the Colony, and in Pondoland.

It occurs very rarely in the King William's Town forest, and is there regarded as a botanical curiosity.

Though growing frequently to a height of 60 and 75 feet, Stinkwood rarely grows quite upright, from the fact, it is alleged, that most of the trees are produced from

coppice shoots. The stinkwood seedling is endowed with a hardy constitution, but when it reaches the ligneous state it requires plenty of air, and to participate freely in the various atmospheric influences: light, dew, rain, &c. It cannot stand dense shade for any length of time. It is reproduced by a process of natural coppicing, which is extremely curious. The trunk of an old tree dies from the top downwards, and then from the base is produced a sheaf of young shoots round the old dead trunk. These dead logs remain standing a long time before decaying, and frequently yield good sound timber. If the old trunk be not removed, and suffered to decay, the young shoots put out roots which run down the parent trunk, eventually reaching the ground, where they take root. Young trees in this manner are very liable to become windfalls.

Stinkwood grows from the sea-level, and within a mile of the sea with a Southern aspect, up to an elevation of about 3,000 feet.

Weight of a cubic foot, dry, 54·168 lbs.

NO. 2.—PTEROXYLON UTILE.

Sneezewood. Kafir: Umtati.

Exhibits:—

King William's Town } 1 Plank, 5 ft. long.
 } 1 Round section.

Port Alfred 2 Half-round sections.

Sneezewood is, perhaps, the most valuable tree in South African forests, and is one of the most durable woods in the world, ranking, in this respect, with Jarrah and Greenheart. The actual durability of the wood is unknown. Fencing posts of heartwood, used on the oldest farms in Natal and the eastern portions of Cape Colony, are sound to the present day. The sapwood is, however, not more durable than that of many other trees. When mature, Sneezewood does not exhibit more than $\frac{1}{4}$ to $\frac{1}{2}$ an inch of sapwood. Thus telegraph poles made of young saplings have failed in a few years. Sneezewood is not touched by the tropical white ant or by marine borers, and sound specimens are exhibited of heartwood cut from marine piles partially immersed for 20 years in the Port Elizabeth jetty. For machine bearings Sneezewood is found superior to *lignum vitae*. It wears longer than brass, and, on an average, one Sneezewood bearing has been found to wear out two of iron. If it has a fault it is that it is too hard. For wagon making and cabinet work Sneezewood is also highly esteemed. It takes an excellent polish and shows a mottled curly grain resembling Satinwood.

The habitat of Sneezewood is the East of the Colony and Natal, from sea-level up to an elevation in the Amatolas of 4,500 feet. The forests of the Transkeian Territories and of Pondoland abound with both Sneezewood and Stinkwood, a circumstance unknown in the old portions of Cape Colony. It is stated to exhibit the best growth in the moist climate of Natal. In the Cape Colony it is most abundant in the Eastern Coast forests, but the largest trees are found in the mountains, where it attains dimensions up to 5 feet in diameter, and 60 feet in height. The natural reproduction of Sneezewood is usually abundant, especially in the coast forests. But in all forests Sneezewood seedlings suffer severely from the ravages of deer, which seem to have an especial fondness for the aromatic taste of the young leaves. Sneezewood leaves provide good fodder for cattle, and were at one time used medicinally by Kafirs.

Sneezewood has a small crown and a light covert, with white bark resembling that of Black Ironwood. In the mountains it loses its leaves in winter, and in the climate of the Eastern coasts its foliage becomes scanty. The seed is small and winged like many of the pines. It is somewhat difficult to collect and preserve as it is ripe at midsummer, a time when it is exposed alternately to scorching land winds and heavy rains.

No. 3.—*PODOCARPUS ELONGATUS*.

Outeniqua Yellowwood—Kafir: Umkoba.

Exhibits:—

Knysna	}	1 Plank 20 ft. long, 5 ft. diameter.
		1 Round section 5 ft. diameter.
		2 Planks 6 feet long.
		2 Round sections.

King William's Town	}	1 Plank 5 ft. long.
		1 Round section.

This tree has a wide distribution in the Colony. At Knysna it is called "Outeniqua," and in the Eastern Forests, "Common" or "Bastard" Yellowwood. It attains larger dimensions than any other tree in the Colony. For its diameter it is not a very tall tree, nor has it much length of bole, but its massive trunk forms a striking feature in all the best forests of the Colony. The kloofs and gorges of Table Mountain contain many trees of small growth.

Outeniqua Yellowwood at Knysna invariably festoon themselves with a long beard-like lichen, which gives them a venerable and ancient appearance. The bark is thin and scaly, almost black, and peels off in irregularly-shaped pieces. The wood is of a light yellow colour, very like deal, but closer and more even in grain: more absorbent and tougher, and without the numerous knots which disfigure deal planking.

Both species of Colonial Yellowwood take an excellent stain and polish, and can be got up to imitate walnut, mahogany, or ebony, with great facility. Yellowwood is extensively used in the Colony for beams, planks, flooring boards, and furniture. Outeniqua, or Bastard Yellowwood, has of late years fallen somewhat out of repute, on account of its liability to attack by dry rot, but the disease arises principally from want of ordinary care in drying, and from felling the timber out of season.

There still remain gigantic specimens of these beautiful and stately trees in the forests of Knysna, and Alexandria on the Coast, and in the Amatola Mountains. Bush cutters have preferred to fell the smaller and more easily handled timber, rather than encounter the labour and difficulty of sawing and slipping these monsters. It has been observed that Outeniqua Yellowwood grows straighter and generally taller on steep ground, but trees with the greatest circumference are generally found on more level ground. One of the largest trees measured at Knysna is 23 feet in circumference, and 80 feet in height. In the Amatolas trees of this size are more common. The largest tree measured there has a girth of 34 feet, and is 90 feet high.

Both the Yellowwoods have the clear straight bole characteristic of conifers, but crowns, which with their gigantic spreading limbs, recall rather the appearance of the British oak of parks and avenues. The crown of a full-grown Outeniqua averages about 60 feet in diameter.

A very large quantity of Outeniqua Yellowwood has been recently felled at Knysna for railway sleepers, and cresoated at the Government factory. Latterly the competition of American and European deals, and ready-made doors and windows, together with the exhaustion and mismanagement of the more accessible forests at Knysna, has considerably reduced the output of Yellowwood.

In the Amatola Mountains, Outeniqua Yellowwood occurs most abundantly at low elevations, or in sheltered gorges higher up the mountain. It is never found on the tops of mountains where Upright Yellowwood grows so abundantly. Thus in the Amatola forests the two Yellowwoods at middle elevations are tolerably evenly represented.

The inside of a log of Outeniqua often shows a dark coloration. The tree has no heartwood, and it is doubtful to what this coloration is due. By some it is attributed to salt petre. It frequently shows a salivic efflorescence. In the centre of the log showing the coloration, there is frequently found a chalky-looking deposit, apparently silica, and the same substance appears again as a white exudation on the bark of unsound trees. A curious fact has been noticed in sawing up Outeniqua Yellowwood.

in the Amatolas, namely, that one side of the log is almost invariably harder than the other.

At Knysna Outeniqua appears to reproduce itself with less facility than Upright Yellowwood, young trees and seedlings of the former being rare, whilst in the Amatola forests, seedlings of both species are equally abundant, and under denser shade than occurs at Knysna.

From calculations made on reliable data obtained at Alexandria (Eastern Coast), the growth of Outeniqua Yellowwood is demonstrated to be extremely slow. From the sapling to the pole stage (up to about 36 years), the increment of trees measured is found to be as follows:—

AVERAGE ANNUAL INCREMENT.

Height in feet	0.59614.
Diameter in inches	0.15959.
Cubic content in cubic feet	0.05240.

The common observation of bushcutters that the growth of Yellowwood saplings is imperceptible, is thus borne out.

No. 4.—*PODOCARPUS LATIFOLIUS*.

Upright Yellowwood (Knysna), Real Yellowwood (Amatolas), Kafir :
Umceya.

Exhibits:—

Knysna	{ 2 Planks. 1 Round section.
King William's Town	{ 2 Planks. 1 Round section.

This tree does not attain the huge size of the preceding. Its bark is whitish grey, with a fibrous appearance not unlike that of many pines. Wood a light yellow colour, of shorter fibre and closer grain, but hardly to be distinguished from *P. elongatus*, Outeniqua Yellowwood.

Unless cut in the proper season, Upright Yellowwood warps and splits badly; but it is evenly grained and easily worked. The trunk of this tree is remarkably straight, and does not bifurcate to the same extent as does Outeniqua Yellowwood. The spread of the crown of a full-grown tree is small, seldom exceeding 30 feet, usually much less. Its branches, compared with Outeniqua, are thin and light. It grows readily from seed, and small trees are abundant in the forest.

Under favourable circumstances the average height of an Upright Yellowwood is about 75 feet when mature, and the average length of bole about 23 feet, and diameter 2 feet. The roots are not usually extensive, and the trees are frequently blown down by violent winds. Upright Yellowwood grows best on tolerably steep ground. Like nearly all conifers neither of the Colonial Yellowwoods are coppicers.

The two species of Yellowwood together constitute fully 50 per cent. of the forests of George and Knysna, and the proportion is nearly as large in the Amatola forests.

Upright Yellowwood is more sappy than Outeniqua. While sawing the latter it is necessary to keep the saw moistened with water, but not so with Upright. Upright Yellowwood again, if felled and left with the crown on, has been observed to season more rapidly than if the crown be cut off, and thus requires even more care in seasoning than Outeniqua.

Yellowwood is best felled in the Amatolas during May, June, and July, and then left to season for a year in a locality sheltered from sun, rain, and hot winds. If left on the ground or in a damp place, or even, in the case of Upright, if packed close in its sappy condition, Yellowwood will rot and decay, instead of seasoning.

Upright Yellowwood makes excellent shingles, and in Natal has been used for coo-perage. It is handsomely veined, and for furniture has a higher reputation than Outeniqua.

No. 5.—*OLEA LAURIFOLIA*.

Black Ironwood. Kaffir: Igqwanxe.

Exhibits:—

Knysna	{ 2 Planks. 1 Round section.
King Williams' Town	{ 2 Planks. 1 Round section.
Port Alfred	1 Round section.

A straight growing tree from 40 to 70 feet high, and from 2 to 3 feet in diameter. Bole from 20 to 60 feet. Bark whitish, smooth; wood very hard; distinction between sapwood and heartwood very pronounced. Sapwood white; heartwood almost black, streaked with wave-like markings characteristic of olive. The trunk is always single to a height of 40 to 60 feet, where it throws out many branches. Spread of the crown about 24 feet; shade rather dense. The berries are very numerous and drop in the month of June. They are of a bluish plumlike colour, about the size of an olive berry, and are greedily eaten by birds, wild pigs, &c.

Ironwood is not often seen to be rotting outside, but many over-mature trees are found to be unsound at the heart, though not necessarily hollow. Unsound trees generally show a black exudation. Decay frequently begins between the heartwood and sapwood, and gradually extends outward until nothing but the heartwood remains. The heartwood is almost imperishable, and nearly equal to *lignum vitae* in durability. It is used extensively for the framework of wagons, and is excellent for furniture but hard to work. Logs of this wood when squared should be sawn through the heart, otherwise they split when exposed to the hot sun. Black Ironwood is abundant in the Knysna forests and in the Amatolas.

Weight of a cubic foot, dry, 64 lbs.

No. 6.—*CURTISIA FAGINEA*.

Assegai—Kafir: Umguna.

Exhibits:—

Knysna	{ 4 Planks (Two 7 feet long). 1 Round section.
King William's Town	{ 2 Planks. 1 Round section.

A tree with 20 to 50 feet of bole; 40 to 80 feet total height; and with diameter up to 4 feet.

Wood of a bright red colour, which becomes rapidly dull on exposure to the air; extremely tough and strong, heavy and elastic, close-grained and durable if exposed to only moderate damp.

Assegai is the best known of all the wagon woods in Cape Colony. It is invaluable for spokes and felloes. It makes handsome furniture, and is used for tool handles, &c.

This valuable tree is becoming scarce in the forests of George and Knysna. It is found throughout the Colony, and is abundant in Tzitzikama forests.

At Knysna, Assegai is considered mature when it attains a diameter of 19 inches, at 3 feet from the ground. This should give a working length of 22 feet, with a diameter of 16 inches in the middle. In the Amatolas the size of mature trees averages higher, trees being not uncommonly met with from 40 to 70 feet high, and from 2 to 3 feet in diameter, and occasionally 4 feet.

Assegai has a curiously rough bark very characteristic, showing on the outside a number of small regular prominences about an inch in diameter. In the Amatolas the only tree with similar bark is the wild currant.

Assegai bark is good for tanning, being second only to Saffraan and Mimosa. Assegai coppices freely and its seed reproduction is good. In the Amatolas it rarely forks. The berries are of an opaque white colour about the size of a large white currant. They are ripe at about the same time as the flowers of the following year appear, which is in spring.

No. 7.—Boxwood.

(Botanical name undetermined.)

Exhibits:—

East London Forests	{	3 Planks.
		3 Round sections.
		3 Rough logs for working.

Found only in the Coast forests in the neighbourhood of East London, where it exists in large quantities. The botanical name of Cape Box has not yet been determined, and specimens have been sent to European botanists for identification. The herbarium exhibited contains perfect specimens of leaves, flowers, and berries. Botanically and in general appearance, in structure and weight of wood, Cape Box is nearly allied to the common Box, *Buxus sempervirens*. Its natural reproduction is very good. The seasoning of this wood has been under observation for little more than a year, and appearances indicate that it will become one of the most valuable woods per cubic foot in the Colony.

When Cape Box is better known in the English market it is anticipated that an export trade will be established. Small shipments have already been made to introduce the wood which is very favourably reported on for engraving purposes.

The "Timber and Trades Journal" of 22nd August, 1885, states this wood to be one of the best woods yet put forward as a substitute for the ever-decreasing supply of true box.

Weight of a cubic foot, when cut, 65 lbs.

No. 8.—GONIOMA KAMASSI.

Kamassi; Knysna Boxwood.

Exhibits:—

Knysna.	{	2 Planks.
		1 Round section.
		8 Rough sections for working.

Abundant in Knysna forests; unknown in the Amatolas. A tree from 16 to 20 feet high, and from 10 to 14 inches in diameter. Wood very hard and close grained, used principally for tools, turnery, and for yoke skeys. Until recently this wood was cut indiscriminately with other species for fencing poles, but its value as a substitute for true Boxwood, has led to its stricter preservation.

Messrs. Young and Co., of Ludgate Circus, engravers on wood, report as follows on Kamassi:—"Suitable for the finest mechanical engraving, such as machinery of all descriptions, also adapted for ordinary engraving purposes."

This wood is considered by some to be superior to East London Boxwood. Further trials will, it is anticipated, lead to an export trade in Kamassi Wood.

No. 9.—*ECKEBERGIA CAPENSIS*.

Essenwood—Cape Ash. Kafir: Umqwenyuizinja.

Exhibits:—

Knysna { 2 Planks.
 { 1 Round section.

King William's Town. 1 Small plank.

A tree from 40 to 50 feet high, and from 2 to 3 feet in diameter, with a spread of crown of about 20 feet. Wood white, soft, resembling ash in appearance.

Abundant in some of the Knysna forests, and generally along the coast. Rare in the Amatolas except in inaccessible localities.

Occurs at an elevation of 5,000 feet on the Hogsback plateau (Amatolas).

Essenwood is largely used for the sides of wagons. It takes an excellent polish, and is much esteemed as a furniture wood.

No. 10.—*VEPRIS LANCEOLATA*.

White Ironwood. Kafir: Umzani.

Exhibits:—

King William's Town { 2 Planks.
 { 1 Round section.

Port Alfred 1 Round section.

One of the few deciduous trees in Cape Colony. Large clean timber, but inclined to fork. Trees are met with up to 60 feet in height, and 5 feet in diameter. In toughness White Ironwood is the Ash of South African forests. It is used extensively for axe handles and all parts of a wagon where tough, elastic wood is required. For the tent hoops of wagons it is tough and light as hickory. Bark thin and crumbling, becoming corky at the base of old trees.

While Ironwood is a good coppicer under all circumstances, but especially if cut as it should be, near the ground. The roots send up shoots freely whenever cut. Reproduction from self-sown seedling's is usually abundant, and frequently met with in the Amatolas after Yellow-wood.

White Ironwood is not a durable wood, and cannot stand exposure to wet.

No. 11.—*TRICHOCLADUS CRINITUS*.

Trichocladus, or Ouderbosch.

Kafir: Sidali.

Exhibits:—

King William's Town { 2 planks.
 { 1 round section.

A valuable underwood in the Amatola mountain forests. Little else is cut from the forests for the firewood supply of King William's Town, but *Trichocladus*, which yields a revenue of about £400 a year in firewood licences. It burns well, even when only slightly seasoned. Grows freely, rapidly, and abundantly in all the mountain forests at about 2000 feet elevation, but rarely attains the dimensions of a tree. It coppices well. In appearance *Trichocladus* is not unlike the common Black Bark, but differs strikingly from the Black Bark in the white tomentose under-surface of the leaf, and in the absence of the fringe of hairs at the margin of the leaf.

When it attains a diameter of about a foot a small streak of Ebony-like heartwood

appears at the centre. Trees are occasionally met with up to two feet in diameter, and a bole of 30 or 40 feet, but such are very rare.

Trichocladus is usually seen in the form of tapering poles under a foot in diameter, at the standard height of five feet from the ground. It seeds sparingly, but its abundance renders it unnecessary to propagate it artificially in the forest nurseries.

Trichocladus has nothing antiseptic in its wood which decays rapidly in the ground. It has been used for temporary fences, and inferior wagon poles. It might also be used for turning as a second-class Boxwood.

The *Trichocladus* growing at Knysna is said to differ somewhat from that of King William's Town.

No. 12.—*ELÆODENDRON CROCEUM*.

Saffronwood. Kafir : Umbomvana.

Exhibits :—

Knysna	{ 2 Planks. 1 Round section.
King William's Town	{ 2 Planks. 1 Round section.
Port Alfred	{ 1 Plank. 1 Round section.

So called from a yellow resinous coating which covers the inside of the outer covering of the bark. The Saffron tree bears a white berry, the size of a small plum, edible and ripe in spring. Bark about an inch thick, of a whitish colour, tinged with bright yellow. Wood hard, tough, close in structure, and of a pretty light red shade.

Medullary rays and concentric zones equally fine. Sapwood white, darkening gradually towards the centre; old heartwood as dark as Walnut. The fine structure of the wood makes it well adapted for carving. It is reported on by Messrs. Young as "excellent for the larger sizes of wood type, posters, &c., and bold engraving generally." Sometimes employed in boat-building, and very commonly for wagons. It takes a fine polish, and is a handsome furniture wood. The proportion of Sapwood about one eleventh of the diameter.

The bark of the Saffron tree is said to be one of the best in the country for tanning purposes, and the practice of barking trees when standing, led at one time to the destruction of large numbers of this species, especially in Kaffraria.

Saffron is found in the forests of George or Knysna, and is fairly plentiful in the Tzitzikama, Eastern Coast, and Amatola forests. Natural reproduction from seed, good, and young saplings common.

Weight of a cubic foot, 54 lbs.

No. 13.—*SIDEROXYLON INERME*.

White Milkwood. Kafir : Umqwashu.

Exhibits :—

Knysna	{ 2 Planks. 1 Round section.
King William's Town	{ 1 Round section.
Port Alfred	{ 1 Plank. 1 Round section.

So called from the milklike substance which exudes from the bark when pierced. Rare in the Knysna Forests, and at the higher elevations of the Amatolas, but common

in the Perie Forests. A tree from 15 to 20 feet high, and from one to one and a half feet in diameter. Bunches of conspicuous yellow berries, with closely packed angular seeds inside, of a bright scarlet colour. Berries in the Amatolas, ripe in June. Bark dark grey, scraggy. Wood whitish, hard, tough, heavy and durable. Generally used for boat-building, fencing and telegraph poles, and, in the Amatolas for wagon-spokes, being by some considered superior to Assegai for the purpose.

No. 14.—*OLEA VERBUCOSA*.

Wild Olive, or Olina wood. Kafir : Umguma.

Exhibits :—

Knysna	{ 2 Planks. 1 Round Section.
King William's Town	{ 1 Plank. 1 Round Section.
Port Alfred	1 Round Section.

Rarely found over a foot or 18 inches in diameter, and 20 or 25 feet in height. A spreading tree of a bushy habit of growth. Bark rough, fibrous. Sapwood of greater volume than heartwood; whitish outside, shewing towards the heart the wavy streaks characteristic of olive. In the heart the black streaks are much closer. Wood hard and very close grained, in some localities used in place of sneezewood. Olive wood stands well as poles, and for the bearings of machinery it is in excellent repute. It does not heat like brass, requires less oil, and wears the spindle less.

Olive wood takes an excellent polish, and is admirably adapted for furniture. The South African Olive, like that of the Northern Hemisphere is an excellent coppicer, two or three poles being produced where one is cut.

Weight of a cubic foot 72lbs.

No. 15.—*PTEROCELASTRUS ROSTRATUS*.

White Pear. Kafir : Umdakane.

Exhibits :—

Knysna	{ 3 Planks. 1 Round Section.
King William's Town	{ 1 Plank. 1 Round Section.
Railway Department	1 Sleeper, after three years' wear.

A tree from 20 to 30 feet high, and sometimes reaching 70 feet. Bark whitish grey, smooth and thin. Wood hard, close grained and heavy; liable to split, but strong across the grain, and is used for wagon felloes. Diameter of the crown of a full grown tree about 18 feet. The trunk is seldom cylindrical, except in young trees. Grows in the forests of Swellendam and Uitenhage, and is found in considerable quantities in all the Knysna forests.

White Pear is nowhere abundant in the Amatolas, having been exterminated in the more accessible forests of that range for wagon making purposes. Seed abundant, ripe about June.

Messrs. C. & D. Young's report on White Pear: "A good useful wood for all the larger kinds of engraving, wood type, &c.

No. 16.—MYRSINE MELANOPHLEOS.

Benkenwood. Cape Beech. Kafir: Isiqwane.

Exhibits:—

Knysna	{ 4 Planks.
	{ 1 Round section.
King William's Town	{ 3 Planks.
	{ 1 Round section.

A tree at the Knysna, from 20 to 25 feet high, and from 12 to 18 inches in diameter. Bark mottled, whitish. Trunk quite straight, usually cylindrical, and without branches for more than half its height. Wood of a pale glossy colour with waves of a transparent and slightly darker colour. Medullary rays well developed, and more marked in a transverse section than the annual rings of growth. A handsome tree, with leaves resembling laurel. Rather scarce. In the Amatolas it is most frequently found in a stunted condition on the outskirts of the forests, but trees of larger size and good growth are met with, especially associated with Red Els and Upright Yellowwood.

Benkenwood was used for retaining the sand-bank at the Kowie River, and taken up sound after 25 years wear.

Weight of a cubic foot, 47 lbs.

No. 17.—CUNONIA CAPENSIS.

Red Els. Kafir: Umqwashube.

Exhibits:—

Knysna	{ 3 Planks.
	{ 1 Round section.
King William's Town	{ 1 Plank.
	{ 1 Round section.

A large tree from 20 to 60 feet high, and from 2 to 3 feet in diameter. Common at middle and lower elevations in the Amatolas; not plentiful in the George and Knysna forests. Bark grey in colour, rough and thick but not deeply cracked; red when chipped.

Red Els has an ample crown, and a somewhat branching trunk. It throws a dense shade, and in the lower Amatolas is most common on the edge of the forest. Wood a rich red colour, hard and tough; used for furniture, takes an excellent polish, and is very handsome. Also valuable for wagon wood and other purposes.

Flowers during the winter when the trees present a pretty appearance, dotted over with closely packed spikes of snowy white flowers, terminal, and about the size of a mealy cob.

Weight of a cubic foot, 47 lbs.

No. 18.—PLATYLOPHUS TRIFOLIATUS.

Exhibits:—

Knysna	{ 3 Planks.
	{ 1 Round section.
King Williams' Town	{ 3 Planks.

A tree from 20 to 40 feet high, and from 2 to 4 feet in diameter. Fairly plentiful at Knysna, scarce in Amatolas. Wood yellowish white, hard and tough, grows usually in kloofs: sometimes straight and graceful, at others crooked and distorted. For durability this wood has a high reputation at Knysna. When sawn into planks is handsome,

and takes a good polish. The lower part of the tree generally has a fine twisted grain, and the roots are valued for turning purposes. Much used for furniture and boat keels.

In the Amatolas, White Els has no reputation amongst bushworkers.

Weight of a cubic foot, 38 lbs.

No. 19.—*HARPEPHYLLUM CAFFRUM*.

Kafir Plum. Kafir: Umngwenye.

Exhibits :—

King William's Town	{ 1 Plank. 1 Round section.
Port Alfred	{ 1 Plank. 2 Round sections.

Common in lower Perie forests, but rare in the Amatolas. Bark thick and rough. Wood white in young trees, but in older trees a nearly uniform dull red mahogany colour from bark to heart. Soft and easily worked. Grows well from stakes driven into the ground, and would probably do well for live fences. Suitable for all indoor work. When oiled or polished, Kafir Plum has a very handsome appearance. Rather liable to warp.

No. 20.—*SCOLOPIA ECKLONII* (Harvey).

Red Pear. Kafir: Iqumza.

Knysna	{ 2 Planks. 1 Round section.
King William's Town	{ 1 Plank. 1 Round section.

At Knysna, a tree from 30 to 35 feet high, and from 2 to 2½ feet in diameter. Very liable to form large buttresses. Bark light grey, often silvery in appearance. In the Amatolas Red Pear attains much larger dimensions, being frequently found 50 or 60 feet high, and occasionally 80 feet, with a bole of 60 feet. Diameter from 3 to 5 feet, and occasionally 6 feet. In the Amatola Cascade forest, some trees rival Yellowwood in size.

Wood hard, heavy, and close grained; is an excellent wood for felloes, rails, and wagon-work of every description; takes an excellent polish, and valued for furniture. Also used for the teeth of mill-wheels.

Natural reproduction from seed, good, the seed being disseminated by birds.

Red Pear does not coppice, but sends up suckers somewhat similar to a poplar. The tree has been almost exterminated in some of the Amatola forests by natives who cut the wood for sake of the fruit.

No. 21.—*BRABEJUM STELLATIFOLIUM* (?)

Red Stinkwood, or Bitter Almond.

Exhibits :—

King William's Town	{ 2 Planks. 1 Round section.
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A valuable but rare tree in the Amatola Mountains; not usually more than 18 inches to 2 feet in diameter.

In Natal Red Stinkwood overtops Yellowwood, and logs are obtainable up to a length

of 60 feet, with a girth of 18 or 20 feet. In the Amatolas Yellowwood is by far the larger tree. Red Stinkwood possesses all the endurance of Sneezewood, and, in Natal, is a favourite wagon-wood, and makes handsome furniture. Trees are usually rotten at the bottom, but decay does not extend more than 5 or 6 feet above the ground. Bark very rough and black.

Red Stinkwood is unknown at Knysna, and in no way resembles the *Oreodaphne bullata*.

No. 22.—*OLINEA CAPENSIS*.

Hard Pear. Kafir: Umnonono.

Exhibits:—

Knysna	{ 2 Planks. 1 Round section.
King William's Town	{ 2 Planks. 1 Round section.

A tree from 25 to 30 feet high, and from 2 to 3 feet in diameter. Scarce in the forests of George and Knysna, and also in the Eastern forests. Bark brown and rugged. Wood yellowish, very hard, tough, and heavy.

A useful wagon and furniture wood, but sometimes objected to on account of its extreme hardness when dry. It is durable out of doors, posts of Hard Pear ranking with Sneezewood and Olivewood for this purpose.

Weight of a cubic foot, 68 lbs.

No. 23.—*PTERCELASTRUUS VARIABILIS*.

Kersewood, or, Candlewood.

Kafir: Umbaurila.

Exhibits:—

Knysna	{ 3 Planks. 1 Round section.
King William's Town	{ 2 Planks. 1 Round section.
Port Alfred	{ 1 Plank. 1 Round section.

A tree from 30 to 40 feet high, and from 1 to 1½ feet in diameter. Bark thin, dark grey. Stem generally ribbed, tall and straight. Wood of a handsome dark red colour; tough, hard, heavy and fine in grain. Contains a large amount of sap, and requires very careful seasoning; warps easily. Sometimes used for wagon-spokes and harbour-piles. Bark used for tanning. Burns brilliantly, hence its name, Candlewood. Common in most Colonial forests, but the Knysna Candlewood is apparently not the same as the Amatola species of the same name.

No. 24.—*EUCLEA UNDULATA*.

Quar.

Exhibits:—

Knysna	{ 2 Planks. 1 Round Section.
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A tree from 20 to 30 feet high, and 12 to 15 inches in diameter. Fairly plentiful at Knysna, but unknown in the Amatolas. Bark pale grey: wood very hard, heavy, and

close-grained. Heartwood of a deep brown colour, sapwood much lighter, both beautifully marked with ripples traversely. Grows gnarled and crooked. Wood little used in the Colony, but undoubtedly of considerable value commercially. For engraving purposes, Messrs. C and A. Young report on Quar; "Nearly equal to Kamassi, and quite suitable for ordinary engraving."

No. 25.—BOGWOOD, OR UMCUBEZA.

(Botanical name undetermined).

Exhibits:—

King Williams Town { 1 Plank.
 { 1 Round Section.
Port Alfred 1 Round Section.

A tree from 30 to 40 feet high, and diameter from 1½ to 2 feet. A fairly abundant tree confined to the forests in the neighbourhood of East London. Bark greyish, thick and fibrous. Wood hard, close-grained, similar to boxwood, without marked heartwood; seasons well and could probably be used as a substitute for boxwood. The botanical name, as also the specific qualities of green and dry wood are not yet determined. Seed bearing trees are numerous, but reproduction does not appear to take place freely as the seed is destroyed by birds and insects. Bogwood is a good coppicer. Flowers February to April.

No. 26.—MILLETIA KAFRA?

Umzumbit or Umtiza.

Exhibits:—

King William's Town { 1 Plank.
 { 2 Round Sections.

A common small tree of the East London and Transkeian Coast forests. Attains a height of 30 to 35 feet, and a diameter of 1½ to 2 feet. Umzumbit is remarkable for its deeply fluted stem, and very hard, well-defined heartwood. The most valuable Kafir walking sticks are made from this wood, by splitting a bittet out of the centre of the tree, and then paring away all but the knob to the thickness required. Clubs and amulets are also made from the wood in the Transkei. Owing to the small size of the tree and its curious habit of growth it can only be used for small work, but the rich colouring of the strongly marked heartwood, has a handsome appearance against the hard but light-coloured sapwood. Umzumbit in the Transkeian forests has a good natural reproduction from seed. The young seedlings have a similar appearance to those of Sneezewood. Umzumbit will probably be a valuable tree, if the Transkeian forests are systematically worked. It is believed to be the hardest and heaviest wood in South Africa.

No. 27.—NUXIA FLORIBUNDA.

Vlier.

Exhibits:—

Knysna { 2 Planks.
 { 1 Round Section.

A tree from 20 to 25 feet in height, and from 15 to 20 inches in diameter. Bark whitish. Wood used principally for wagon work. A handsome tree with fine

large leaves; it grows generally in groups on the summits of ridges. Roots frequently exposed a considerable distance from the ground. Fairly plentiful at Knysna: unknown in the Amatolas.

Weight of a cubic foot, 47 lbs.

No. 28.—*OCHINA ARBOREA*.

Redwood (Knysna); Cape Plane (Amatolas).

Kafir: Umtensema.

Exhibits:—

Knysna	{ 1 Plank.
	{ 1 Round Section.
King William's Town	{ 2 Planks.
	{ 1 Round Section.

This tree, though rarely exceeding a foot in diameter, frequently attains a height of 40 feet. Crown about five feet in diameter; hardly any branches and few leaves. Bark, reddish brown with blotches, quite smooth, and peels like that of the European Plane tree. Wood very hard and strong, straight and close in grain, and easily worked. Seldom splits or warps, and is a most useful wood where great strength is required without great size. Said to be almost imperishable as poles for fencing. Well adapted for furniture tools, axe handles, &c. Has been much used for wagon poles, and all sorts of fancy work.

Messrs. Young report on Knysna Redwood:

"Very suitable for ordinary engraving, also most excellent for wood type."

No. 29.—*RHUS THUNBERGII*.

Klip Els: Rock Ash.

Exhibits:—

Knysna	{ 3 Planks (1 seven feet long).
	{ 1 Round Section.

Grows up to 30 feet high. Wood hard, close, heavy, and tough. Bark, greyish, smooth. Affects rocky situations. Not much used at Knysna, and in the Amatolas, Klip Els is a small insignificant tree turned to no use.

No. 30.—*XANTHOXYLON CAPENSE*.

Knobwood or Paardepram.

Kafir: Umnunqumabele.

Exhibits:—

King William's Town	{ 1 Plank.
	{ 1 Round Section.

A very curious tree with a small pinnate leaf. As a seedling has the appearance of a Sneezewood.

Knobwood trees run up to a height of 50 to 60 feet with a girth of 4 feet. The bark is studded with numerous conical protuberances presenting a curious aspect. The wood is prettily marked, yellow in colour, with well defined rings of growth. Used for wagon wood, spokes and planking, but liable to warp and crack if not properly seasoned.

No. 31.—*CELTIS RHAMNIFOLIA*.

Camdeboo Stinkwood. Kafir: Umvunuri.

Exhibits:—

King William's Town { 1 Plank.
1 Round Section.

A useful wood of the Amatolas for yokes, poles, wagonwood, and table legs, but liable to warp. In the forest, Camdeboo has much the appearance of European Elm. It is one of the few deciduous trees of Cape Colony. Its budding was regarded by natives as the index of spring, and the time to sow mealies. Camdeboo Stinkwood is a heavy wood; much closer in the grain than real stinkwood, and in no way resembling it. Is spread over the Amatola forests, but most plentiful at the lower elevations. It shoots from the roots, but does not coppice well. The heartwood is of a dark greenish colour, and takes a good polish, but warps too much to be sawn into panelling.

No. 32.—*CALODENDRON CAPENSE*.

Wild Chestnut, or Kastanie.

Exhibits:—

Knysna { 2 Planks.
1 Round Section.
King William's Town { 2 Planks.
1 Round Section.
Port Alfred 1 Round Section.

A handsome tree with dense light foliage something like a common chestnut, running up to 60 and occasionally 70 feet high, with a good straight trunk of 4 or 5 feet in diameter. One of the few deciduous trees in South Africa.

Wood very light, and almost as tough as White Ironwood, light in color, no heartwood; used for the hoops of wagon tents, yokes, &c. Is scarcely hard enough for wagon wood, but used by natives for sledges. Bark smooth, very light grey colour. The tree flowers about Christmas time in the mountains, and is then a beautiful sight, each branch being tipped with heavy panicles of pink blossom. The tree is raised easily from seed, and has been much cultivated artificially in Natal.

No. 33.—*EUCLEA*, sp.

Red Currant. Kafir: Umhlakati.

Exhibits:—

King William's Town. . . . 1 Plank.

A small timber tree of the Eastern mountain forests found at all elevations: a partial leaf shedder: foliage shews fine copper-coloured tints in autumn. A useful redwood, at present but little used except for Kafir pipes; the heart of this tree and the root of the Willow, *Salix gariiepina*, are the woods commonly used by Kafirs in the neighbourhood of King William's Town for this purpose.

No. 34.—*PHOEBEOS ZEYHERI*.

Thorn Pear, or, Wolf Pear.

Kafir: Iqumza elinameva.

Exhibits:

King William's Town { 1 Plank.
 1 Round section.

A tall straight tree growing in the Amatolas up to 3 feet in diameter, and 60 or 70 feet high. The trunk, even in the largest tree is armed with huge branching thorns. These thorns are evidently modified branches, each thorn running through from the bark to the centre of the trunk. Said to be the hardest wood to saw in the Amatolas. Sawyers say it takes what they call an "ebony saw" to cut it. It is not a favorite with wagon makers on account of its extreme hardness, the knots formed by the thorns blunting their chisels. In former times it was, however, largely used, and is now nowhere very abundant in the Amatolas.

Thorn Pear shoots freely from the roots, old trees being sometimes seen surrounded with a thicket of suckers. It also coppices to some extent as do all the four Pears, but White Pear is the only really good coppicer of the four. Both Red Pear and Thorn Pear throw up suckers, the former most abundantly. Its extreme hardness renders Thorn Pear very serviceable as teeth for Mill Wheels and it takes a good polish.

No. 35.—*GRUMILIA CYMOSA* (?)

Wild Lemon. Kafir: Lanumi.

Exhibits:—

King William's Town { 3 Planks.
 1 Round section.
Port Alfred 1 Round section.

In the upper and moister forests of the Amatolas this tree is as abundant as Yellow-wood. It is remarkable as having the densest shade, and the worst shape of any tree in the forest. Wood very little used for any purpose. Has occasionally been used for planks and yokes. It is said to stand well in water, and has the reputation of being durable in the ground. After seven years wear in the ground, posts have been taken up perfectly sound, their squared edges being quite fresh, yet it is difficult to find a really sound tree. Wood of a uniform bright yellow from bark to centre. Handsomely veined pieces are sometimes used for furniture and panelling. The wood is similar in structure to Benkenhout, medullary rays being more prominent in a transverse section than the annual rings of growth.

The ordinary tree in the Amatolas has a huge hollow trunk, surrounded by a circle of straight shoots, like an Assegai. Wild Lemon seeds but rarely, but the berries which are small and black, may be observed ripe at all times of the year.

It appears to be a tree of more rapid growth than many indigenous trees, shewing a mean average of 10.5 annual rings of growth per inch of radius. In their natural coppice state, Lemon trees live to a great age.

No. 36.—*SCHOTIA LATIFOLIA*.

Boerbone.

Exhibits:—

King William's Town . . 1 Round section.
Port Alfred 1 round section.

The largest tree in the East London forests, and in the Eastern mountain forests up to an elevation of 2,000 feet. Above this elevation it is rare, but occurs on warm dry

slopes. Flowers in February—handsome terminal panicles of pinkish flowers. Seeds large, edible, and sometimes eaten roasted. Bark gives a good dye. Boerbone wood, hard, dark and heavy; heartwood of a greenish hue.

No. 37.—*HIPPOBROMUS ALATA*.

Horsewood, or, Paardepis.

Exhibits :—

Grows up to 30 feet high, and from 18 to 20 inches in diameter. Bark pale yellowish green. Wood white, close grained, used for yokes and cabinet-making. Common in Knysna and Eastern Forests.

No. 38.—*ROYENA LUCIDA*.

Black bark, or Swartbast. Kafir : Umcaza.

Exhibits :—

King William's Town .	{	3 Planks.
		1 Round block.
Port Alfred		1 Round section.

A tree from 40 to 50 feet high, and from 1 to 2 feet in diameter. Common at Knysna and in the Eastern forests. Bark characteristically black when scratched. Wood exceedingly tough when green, becomes brittle when dry.

Makes good yokes.

No. 39.—*BUDDLEIA SALVÆFOLIA*.

Saliewood. Kafir : Umkaza.

Exhibits :—

Knysna	{	3 Planks.
		1 Round section.

A small shrubby tree from 15 to 20 feet high, and from 10 to 15 inches in diameter. Common at Knysna, and in the Eastern Coast forests. Wood hard and tough; has a beautiful wavy grain. Used chiefly for cabinet-making and for teeth for mill wheels. Selected pieces are used for veneers, and when polished are not inferior to Walnut.

For engraving purposes, Messrs. Young reports on Saliewood : "Quite suitable for the bolder kinds of engraving, also excellent for wood type."

No. 40.—*VIRGILIA CAPENSIS*.

Keurboom.

Knysna	{	2 Planks.
		1 Round Section.

A tree from 20 to 25 feet high, and from 1 to 1½ feet in diameter. Common throughout the Colony. Bark, dark grey nearly, half-an-inch in thickness. Wood light, white, and rather soft, except in very old trees. As a tree Keurboom is short lived, and subject to the ravages of worms. Used for yokes, wagonwood, rafters, and spars, and recently found to answer well for naves.

Grows thickly and invariably on the edge of the forest, particularly on burnt forest land. Very abundant at Knysna. From the bark, when pierced, there exudes a very transparent gum, worth, at Knysna, 6d. per lb., which might be made of commercial importance, and applied to many purposes, medicinal and otherwise, for which gum arabic is now used.

No. 41.—*CELASTRUS ACUMINATUS*.

Silkbark or Zybast.

Exhibits :—

Knysna	{ 2 Planks. 1 Round Section.
King William's Town	{ 1 Plank. 1 Round Section.

A small tree, rarely exceeding a foot in diameter, and 20 feet of bole. Common at Knysna, and in the Upper Perie forests.

Silkbark derives its name from the fact that when the leaves or young twigs are broken, the spiral rings of vascular tissue are so strong that instead of breaking they draw out, showing fine, silky white threads across the line of fracture. At Knysna elephants are very partial to the foliage of this tree, and numbers are pulled down by them, especially in swampy places.

Bark thin, whitish-grey; wood heavy, hard, of an even close structure, prettily shaded when polished. Used in turnery, and for fancy work. A favourite wood with Kafirs for making knobkerries, and very suitable for umbrella handles.

Flowers early in summer, in berry the following autumn.

No. 42.—*UMKWENKWE*.

(Botanical name undetermined).

Exhibits :—

King William's Town	{ 1 Plank. 1 Round Section.
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A tree from 40 to 50 feet in height, and from 1 to 2 feet in diameter. Fairly abundant in the Amatolas. Bark used for gall sickness. Wood white, soft, even in grain. Not much used.

No. 43.—*NIEBUHRIA TRIPHYLLA*.

White wood, or Wittehout.

Exhibits :—

Knysna	{ 2 Planks. 1 Round Section.
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A handsome tree growing at Knysna from 20 to 25 feet in height, and from 12 to 15 inches in diameter. Wood white, light, and tough. Suitable for furniture, building purposes, and tool handles, but not much used.

No. 44.—WILD PEACH.

(Botanical name undetermined.)

Exhibit :—

King William's Town . 1 Plank.

A tree with a leaf like the common Peach. Bark smooth, wood white. Has straight side shoots like the Assegai. It has not a wide distribution, being confined to the Upper slopes of the Amatolas mountains.

No. 45.—ERYTHRINA CAFFRA.

Kafir tree. Kafir: Umgazi.

Exhibits :—

King William's Town { 1 Plank.
1 Round Section.

Grows in the Alexandria forests to the size of the largest Yellow woods, being found from 50 to 60 feet high and 3 to 4 feet in diameter. Common at low elevations of the Amatolas, but does not attain the large size met with at Alexandria. Requires a moist warm climate. Like its congener *Erythrina Indica* of India, it is readily propagated from stakes driven into the ground. Used to a small extent for break-blocks and water troughs, and has been employed for making light boxes. Hollow trunks of *Erythrina* were formerly used by natives for canoes. Seed, a small bright scarlet bean used by children for making necklaces.

No. 46.—GARDENIA THUNBERGII.

Exhibits :—

Leaves, &c. in herbarium (King William's Town.)

No. 47.—PLECTRONIA VENTOSA.

Schaapdrolletje.

Exhibits :—

Knysna { 2 Planks.
1 Round Section.

A tree from 15 to 20 feet high. Wood hard, heavy, close and tough. Handsome when polished; suitable for fancy work.

No. 48.—RED PITH OR SMALL BLAR.

(Botanical name undetermined.)

Exhibits :—

King Williams Town { 3 Planks.
1 Round Section.

A small tree of the Amatolas, similar to Black Bark in appearance, but having young shoots of a scarlet colour, and a red streak running down the pith.

No. 49.—SYCOMORUS CAPENSIS.

Wild Fig.

Exhibits :—

Knysna	{ 1 Plank. 1 Round Section.
King Williams Town	{ 2 Planks. 1 Round Section.

Common at Knysna, and in the Eastern forests. Can hardly be called a timber tree. Wood light, seldom used, polishes well.

No. 50.—CABBAGE TREE.

Kafir : Senga.

(Botanical name undetermined.)

Exhibits :—

Leaves, &c., in Herbarium (King Williams Town).

A tree with soft wood like a cabbage stalk, sometimes used for the break-blocks of wagons.

No. 51.—WOLVEDOORN.

(Botanical name undetermined.)

Exhibits :—

Knysna	{ 2 Planks. 1 Round Section.
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Known at Knysna as "Wifje volvedoorn," a tree about 30 feet in height, and 2 feet in diameter. Wood hard, heavy : used for turning, axe handles, felloes and spokes.

No. 52.—PROTEA, Sp.

Terblantz.

Exhibits :—

Knysna. 1 Plank.

A tree from 30 to 40 feet high, and from 2 to 2½ feet in diameter. Wood hard, heavy, reticulated. Little known. Few trees found in George and Knysna forests.

No. 53.—RHUS LAEVIGATA.

Taaibosch.

Exhibits :—

Knysna	{ 1 Plank. 1 Round Section.
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A shrub common throughout the Colony. Wood hard, tough, reddish. Suitable for turners' work, and used in wagon making.

No. 53A.—BOSCH TAAI-BOSCH.
(Botanical name undetermined).

Exhibits :—

Knysna { 1 Plank.
 { 1 Round section.

A shrubby tree about 20 feet high. Wood very tough and strong ; reddish in colour ; handsome when polished.

No. 54. CELASTRUS SP.
Swarthout, or, Blackwood.

Exhibits :—

Knysna { 2 Planks.
 { 1 Round section.

A tree from 30 to 40 feet high, and 9 to 18 inches in diameter. Bark like silk-bark in appearance. Wood hard, tough, and of a dark colour ; used principally for wagon-wood at Knysna.

No. 55.—NEW WOOD.
(Botanical name undetermined.)

Exhibits :—

Knysna { 2 Planks.
 { 1 Round section.

A large tree only recently brought to notice at Knysna ; not unlike Red Els. Wood bright red in colour, rather coarse in grain ; takes an excellent polish.

No. 56.—EUCLEA LANCEOLATA.
Bosch guarri.

Exhibits :—

King William's Town . 1 Plank.
Port Alfred 1 Round section.

A straight-growing tree from 30 to 35 feet high, and about one foot in diameter, growing in the Eastern coast forests, but of little importance. Wood hard and heavy, and used for the disselbooms of wagons.

No. 57.—MYSTROXYLON KUBU.
Kaboo Els.

Exhibits :—

King William's Town . 3 Planks.
Knysna { 2 Planks.
 { 1 Round section.

Grows up to 20 feet in height : can hardly be considered a forest tree. Wood hard, tough, and close in grain. Little known or used, but appears to possess good qualities. Suitable for wagon-work.

No. 58.—WILD CHERRY.

Exhibits:—

Port Alfred 1 Plank.

No. 59.—*MIMUSOPS OBOVATA*.

Red Milkwood.

Exhibits:—

King William's Town { 2 Planks.
1 Round section.Port Alfred . . . { 1 Plank.
1 Round section.

A tree from 15 to 25 feet high, and $1\frac{1}{2}$ to 2 feet in diameter. Bark thin, smooth. Wood yellowish-white, close grained, tough, hard, and durable. Used principally for felloes, axles and various wagon work.

No. 60.—*HALLERIA ELLIPTICA*.

Septee or Oudehout.

Exhibits:—

Alexandria Forests . { 1 Plank.
1 Round section.

A tree from 10 to 20 feet high, and from 6 to 9 inches in diameter. Abundant in the Eastern coast forests of Alexandria; rare or unknown elsewhere in the Colony. Bark greyish white, smooth, and very thin. Wood rather soft but tough, and in old trees very hard. Used principally for fencing purposes, but well adapted for axe handles, &c.

No. 61.—*ATHERSTONEA DECUSSATA*.

Kajatenhout, Cape Teak, or Cape Oak.

Exhibits:—

Alexandria Forests . { 1 Plank.
2 Round section.

Port Alfred 1 Half-round section.

A tree from 20 to 30 feet high, and from 1 to $1\frac{1}{2}$ feet in diameter. Very abundant in the Alexandria forests. Wood yellowish, hard, heavy and tough, and less brittle than oak. Not much used in the localities where it grows, but adapted for staves, and cooper's work generally.

No. 62.—*CAPPARIS ALBITRUNCA*.

WITGAT BOOM.

Exhibits:—

Port Alfred { 1 Round section.
1 Small "

(Contributed by Mr. E. J. Dunn, F.G.S., Colonial Geologist).

The trunk of this tree appears from a distance as though whitewashed. A small tree. Bark thick, smooth, pure white. Wood white, tough, used for yokes. Witgat-boom grows in the driest situations: very subject to the defect called "Lunare" in France.

No. 63.—*PROTEA MELLIFERA*.

Sugar Bush.

Exhibits:—

King William's Town { 1 Plank.
 { 1 Round section.

A small tree of a bushy habit of growth abundant in many parts of the Western and Eastern districts of the Colony. Height 10 to 12 feet, diameter 8 to 10 inches. Bark brown, very thick and much rent. The wood has a reddish tint; its grain is beautifully reticulated, and useful for ornamental furniture. Plentiful on the Cape Peninsula; wood principally used for fuel, and bark for tanning.

No. 64.—*BEANWOOD*.

Exhibits:—

Port Alfred . . . 1 Plank

Wood used for fuel; bark for tanning.

No. 65.—*MYRTLE*.

Exhibits:—

Port Alfred . . . 1 Round section.

No. 66.—*GU GU BASSI*.

Exhibits:—

Port Alfred . . . 1 Half-round section.

INDIGENOUS WOODS FROM THE WEST AND NORTH OF
CAPE COLONY.No. 69.—*WIDDRINGTONIA JUNIPEROIDES*.

Cedar Tree.

Exhibits:—

Clanwilliam . . . { 2 Planks.
 { 1 Round section.

A tree formerly very abundant in the Cedar Mountains of Clanwilliam, and capable of attaining great dimensions. Sir John Alexander says that in 1836 a tree was cut down 36 feet in girth, yielding 1,000 feet of planking. The internal woodwork of the church at Clanwilliam is all Cedar.

The axe and conflagration have well-nigh exterminated this valuable tree. Young trees which remain are from 15 to 20 feet high, and 1 to 2 feet in diameter. They are scattered irregularly among the abrupt crags in the highest parts of the mountains, covered with snow in winter. Even these trees are sought out, and wood-cutters consider them well worth the trouble of carrying on their shoulders to the valley below from the difficult spots in which they have taken refuge.

The Cedar Tree has been very successfully raised from seed in the Government nurseries at Tokai, and large numbers have been planted out at the higher elevations of Table Mountain.

No. 70.—*EUCLEA PSEUDEBENUS*.

Cape Ebony.

Exhibits:—

From Orange River . . . 1 Small block.

This wood is found growing on the borders of the Orange River. No information is available as to the quantities in which it exists. It attains a diameter of about a foot. Bark thin. Wood jet black, durable and hard. Recklessly destroyed for fuel.

No. 71.—*LEUCODENDRON ARGENTEUM*.

Silver Tree.

Exhibits:—

Table Mountain . . . $\left\{ \begin{array}{l} 1 \text{ Plank.} \\ 1 \text{ Round Section.} \end{array} \right.$

A tree from 30 to 50 feet high, and about 18 inches in diameter. So called from the silvery appearance of the leaves. Grows only at the middle elevations of the Table Mountain range, and forms a very striking feature in the landscape, especially on the South eastern side, and on the Lion's Head. Wood soft; employed formerly for furniture and building purposes; now not much used except for firewood. Grows quickly, reproduces itself easily from seed. Leaves used for decorations, and making fancy articles, mats, &c. The wing of the seed is composed of four feathers in the form of a cross, threaded on a slender axis on which it slides up and down, presenting a curious appearance to the observer.

No. 72.—*RHUS VIMINALIS*.

Karru wood.

Exhibits:—

From the Karoo . . . $\left\{ \begin{array}{l} 1 \text{ Plank.} \\ 1 \text{ Round Section.} \end{array} \right.$

A small tree from 10 to 14 feet high, and 12 to 15 inches in diameter, somewhat resembling a Willow. Grows principally on the banks of water courses, usually dry, in the Karoo. Bark grey and smooth. Wood hard, tough and elastic; of a handsome reddish colour. Takes an excellent polish. Used for wagon tent hoops. Is not attacked by insects.

Karru grows readily from stakes driven into the ground, and makes a capital live fence.

No. 73.—*ACACIA HORRIDA*.

Thorn Tree; commonly called Mimosa.

Exhibits:—

From the Karoo 2 Planks.

A very thorny tree from 20 to 25 feet high, and 1 to 1½ feet in diameter. Bark dark grey, containing a large percentage of tanning principle. Wood hard and tough, used

for building purposes, and for wheels, furniture, yokes, poles, and rural implements. The most common tree on the northern borders of the Colony, where it grows in large clumps.

NATURALISED AND INTRODUCED TREES.

Wood Specimens from the Cape Peninsula.

No. 74.—*QUERCUS PEDUNCULATA.*

Oak.

Exhibits:—

1 Plank, 1 Round Section, and Railway Sleepers.

This Oak is thoroughly acclimatised in all the temperate portions of the Colony. Introduced by the earliest Dutch Settlers two centuries ago. It grows luxuriantly, bears acorns regularly and very abundantly. Extensively reared in the Government nurseries at Tokai and Ceres Road. At Tokai 60,000 young trees growing for planting out on Table Mountain. Transplants well, and little care is usually taken in the process. A pernicious practice has hitherto obtained in the Colony of cutting off the heads of trees when transplanted. The wood has been used for railway sleepers and lasts well. Portions of old sleepers are exhibited taken up after 14 to 20 years wear.

No. 75.—*PINUS PINEA.*

Stone Pine.

Exhibits:—

1 Plank, 1 Round Section.

Flourishes on the Cape Peninsula. Plantations of Stone and Cluster Pines on the lower slopes of Table Mountain. Supply Capetown and suburbs with firewood, scaffolding poles, &c. Stone Pine is rarely sawn into planks though excellent in quality. Imported deals now almost exclusively used for building purposes. Trees 25 years old give an average of 5 to 8 annual rings of growth per inch of radius. Self-sown seedlings very abundant; in favourable localities they come up like weeds. The edible seed of Stone Pine is not utilised in Cape Colony. A trial has been made to protect Stone Pine poles from rot with a solution of Sulphate of Copper (taken into the greenwood by capillary attraction), for use as fencing poles.

No. 76.—*PINUS PINASTER.*

Cluster Pine.

Exhibits:—

1 Plank. 1 Round Section.

Grows exceedingly well on the Cape Peninsula, and has been successfully sown in the Government plantations in the East of the Colony up to an elevation of 4,000 feet in the Amatola Mountains. Growth about twice as rapid as *P. Pinea*. Used principally for firewood in Capetown.

No. 77.—*LAURUS CAMPHORA.*

Camphor Tree.

Exhibits:—

1 Plank, contributed by Messrs. Iaacs & Co.
1 Round Section.
1 Railway Sleeper.

This tree was introduced into Cape Colony, by Governor Van du Stell, from Java, about 200 years ago, and is now thoroughly acclimatised at Somerset West, near False

Bay; where self-sown seedlings are abundant. The stump of the tree first planted is still in existence, and many large trees have since been grown.

The wood is used for furniture and realises high prices. When slightly stained it is hardly distinguishable from mahogany.

As railway sleepers Camphor wood appears to be imperishable; a portion of one taken up after 21 years wear is exhibited by the Railway Department.

The Camphor tree is extensively cultivated in Government nurseries; large numbers have been planted out at Ceres Road, and on Table Mountain. Tokai nursery now contains 20,000 plants.

No. 78.—EUCALYPTUS GLOBULUS.

Australian Blue Gum.

Exhibits:—

1 Plank.

1 Round Section.

Introduced into Cape Colony, 1828, by Governor Sir Lowry Cole, who brought plants from Mauritius, two of which are still standing in the Capetown Botanic Gardens. The largest is 19 feet in girth, at 3 feet from the ground, and 95 feet high, further growth being stopped by the violence of prevailing winds.

The Blue Gum is a favourite tree on account of its hardy nature and rapidity of growth.

Trees planted 10 years ago, in the Government Plantation, at Worcester, are 100 feet high, and 5 to 6 feet in diameter. Wood used at Ceres, for wagon making; but principally for posts and firewood. Experiments are being made with Blue Gum for railway sleepers.

Extensively grown in Government nurseries, from which large numbers are annually distributed to the public at a nominal charge. Reproduction from self-sown seedlings, observed at Klapmuts and at Worcester plantations: may therefore be regarded as a naturalised tree.

In 1885, 138,000 plants of 33 varieties of *Eucalyptus* were raised at Tokai, of which 108,000 were Blue Gum; 12,000 *E. marginata*; 12,000 *E. robusta*; and 31,000 *E. Rostrata*.

No. 79.—ACACIA SALIGNA.

Port Jackson Wattle.

Exhibits:—

1 Plank. 1 Round Section.

Extensively cultivated on the Cape Flats, between False and Table Bays, where it is thoroughly naturalised. When once established self-sown seedlings come up like weeds. Wood used as fuel, and pick handles. Bark contains about 30 per cent. of tannin and realises £7 10s. per ton. May be stripped at about 7 years old. Large quantities of seed distributed annually by Government.

No. 80.—ACACIA GLAUCOPHYLLA.

Glaucomphylla.

Exhibits:—

1 Plank. 1 Round section.

Grows quite as well as *A. saligna*, but not so extensively cultivated. A useful tree where limestone occurs.

No. 81.—*ACACIA MELANOXYLON*.
Australian Black Wood.

Exhibits :—

1 Plank. 1 Round section.

Grows well : but nearly all the trees in the Western districts of the Colony have been attacked and destroyed by the Australian bug, or *Dorthesia (Icerya Purchasi)*. Further cultivation therefore discouraged.

No. 82.—*HAKEA SUAVEOLEUS*.
Hakea.

Exhibits :—

1 Plank. 1 Round section.

Extensively grown for live fences, especially for gardens. 68,000 plants were raised at Tokai in 1886.

No. 83.—*POPULUS ALBA*.
White Poplar.

Exhibits :—

1 Plank. 1 Round section.

Grow anywhere near water. Wood used for fencing posts, and possesses all the qualities which characterise the wood in a warm climate.

No. 84.—*PIRUS COMMUNIS*.
Pear Tree.

Exhibit :—

1 Round section.

Many varieties of Pear grow extremely well in all the temperate portions of the Colony, and attain large dimensions.

No. 85.—*SALIX BABYLONICA*.
Weeping Willow.

Exhibits :—

1 Plank. 1 Round section.

Attains large dimensions in the Colony.

No. 86.—*ARAUCARIA EXCELSA*.
Norfolk Island Pine.

Exhibit :—

1 Round section.

Attains large dimensions, and is grown as an ornamental tree in gardens.

No. 87.—*MELIA AZEDARACH*.
Pride of India.

Exhibits :—

1 Small Plank. 1 Round section.

Wrongly called *Syringa* in the Colony. An ornamental tree grown in gardens and shrubberies. Attains a height of 30 to 40 feet.

(2.) WESTERN FOREST DIVISION.

NURSERY LIST. TOKAI, 1885.

Variety.	Planted at Tokai.	Distrib- uted.	Stock still in Nursery.	Total.
<i>Aberia caffra</i>	2,000	2,600	7,000	11,600
<i>Abies Smithiana</i> .....	....	....	1,100	1,100
" <i>Webbiana</i> .....	....	....	270	270
<i>Acacia</i> (Anna) .....	....	....	1,250	1,250
" <i>armata</i> .....	....	50	75	125
" <i>cultriformis</i> .....	....	50	50	100
" <i>cyanophylla</i> .....	....	25	500	525
" <i>decurrens</i> .....	....	50	250	300
" <i>giraffae</i> .....	....	25	25	50
" <i>horrida</i> .....	....	....	6,000	6,000
" <i>implexa</i> .....	....	50	400	450
" <i>pycnantha</i> .....	....	100	700	800
" <i>saligna</i> .....	....	250	700	950
" <i>spec:</i> .....	....	50	25	75
<i>Acer pseudoplaranus</i>	6	27	870	903
<i>Ailanthus glandulosa</i>	10	200	2,000	2,210
<i>Albizia procera</i> .....	....	....	7	7
<i>Angopher lanceolata</i>	6,200	1,180	400	7,780
<i>Araucaria Braziliani</i> .....	....	....	9	9
<i>Betula alba</i> .....	....	....	500	500
<i>Bignonia catalpa</i> .....	....	....	2,500	2,500
" <i>speciosa</i>	50	262	100	412
<i>Brachytis acerifolia</i> .....	....	25	20	45
<i>Carya alba</i> .....	....	50	15	65
<i>Cassia ericifolia</i> .....	....	....	120	120
<i>Castanea Americana</i> .....	....	....	20	20
" <i>vesca</i> .....	....	....	100	100
<i>Castanospermum Australe</i>	100	....	1,400	1,500
<i>Casuarina equisetifolia</i>	5,000	1,020	8,000	14,020
" <i>leptoclada</i> .....	....	1,150	6,000	7,150
" <i>quadri-valvis</i> .....	....	410	10,000	10,410
" <i>tenuissima</i>	5,300	1,525	....	6,825
<i>Cedrus deodara</i> .....	....	....	3	3
<i>Celtis spec:</i> .....	....	....	8	8
<i>Ceratonia siliqua</i>	50	250	50	350
<i>Cercis siliquastrum</i> .....	....	....	100	100
Carry forward.....	18,716	9,349	50,567	78,632

NURSERY LIST—continued.

Variety.	Planted at Tokai.	Distrib- uted.	Stock still in Nursery.	Total.
Brought forward.....	18,716	9,349	50,567	78,632
<i>Cinchona ledgeriana</i> .....	....	....	25	25
<i>Crategus oxyacantha</i>	10	210	400	620
<i>Cupressus Goveniana</i> .....	....	....	800	800
" <i>horizontalis vel pyramidalis</i> ..	900	150	10,600	11,650
" <i>Lawsoniana</i> .....	....	41	2,600	2,641
" <i>Macrocarpa</i>	2,600	600	15,000	18,100
" <i>Sinensis</i> .....	....	....	2,360	2,360
" <i>torulosa</i> .....	....	25	30	55
<i>Curtisia faginea</i>	1,000	....	3,385	4,385
<i>Dalbergia sisso</i> .....	....	....	100	100
<i>Durante elisia</i> .....	....	....	50	50
<i>Elaeodendron croceum</i> .....	....	2	200	202
<i>Eriobotrya japonica</i>	200	50	300	550
<i>Eucalyptus alba</i>	1,200	500	....	1,700
" <i>amygdalina</i>	2,200	500	100	2,800
" <i>botryoides</i>	150	....	....	150
" <i>calophylla</i>	800	....	....	800
" <i>coriacea</i> .....	....	25	....	25
" <i>cornuta</i> .....	....	100	1,400	1,500
" <i>diversicolor</i>	8,300	300	....	8,600
" <i>eugenioides</i> .....	....	50	....	50
" <i>globulus</i>	7,000	31,940	15,000	53,940
" <i>goniocalya</i> .....	....	25	....	25
" <i>leucoxylon</i> .....	....	100	....	100
" <i>longifolia</i>	2,000	1,500	....	3,500
" <i>marginata</i>	10,900	800	50	11,750
" <i>megacarpa</i> .....	....	300	....	300
" <i>obliqua</i>	7,150	....	....	7,150
" <i>occidentalis</i> .....	....	100	....	100
" <i>paniculata</i> .....	....	50	....	50
" <i>piperita</i> .....	....	50	....	50
" <i>platypua</i> .....	....	50	....	50
" <i>purpurea</i> .....	....	100	....	100
" <i>punctata</i>	350	300	....	650
" <i>resinifera</i>	700	....	100	800
" <i>robusta</i>	7,000	4,665	700	12,365
" <i>rostrata</i>	10,000	400	20,600	31,000
" <i>rudis</i>	500	25	....	525
" <i>saligna</i> .....	....	25	....	25
" <i>siderophloia</i> .....	....	100	....	100
" <i>sideroxylon</i>	2,900	1,825	....	4,725
" spec :	1,600	400	....	2,000
" spec :	460	50	....	500
" spec :	1,000	....	....	1,000
" <i>tereticornis</i>	1,000	500	....	1,500
" <i>viminalis</i>	25	25	....	50
Carry forward.....	88,551	55,232	124,267	268,050

NURSERY LIST—continued.

Variety.	Planted at Tokai.	Distrib- uted.	Stock still in Nursery.	Total.
Brought forward.....	88,551	55,232	124,267	268,050
<i>Erythrina caffra</i>	10	10	100	120
<i>Fabricia losvigata</i> .....	....	....	6,000	6,000
<i>Fraxinus excelsior</i> .....	....	....	20	20
<i>Frenela australis</i> .....	....	25	340	365
<i>Gleditschia triacanthus</i> .....	....	300	1,000	1,300
<i>Gonioma Kamasasi</i> .....	....	....	512	512
<i>Grevillea robusta</i>	7,200	2,650	3,500	13,350
<i>Grewia spec:</i> .....	....	....	3	3
<i>Haematoxylon campechianum</i> .....	....	....	700	700
<i>Hakea suaveolens</i> .....	....	18,225	50,000	68,225
<i>Harpephyllum caffrum</i>	1	....	2	3
<i>Juglans nigra</i> .....	....	5	4	9
<i>Juniperus Virginiani</i>.....	....	....	100	100
<i>Kydia calycina</i> .....	....	....	20	20
<i>Larix Europea</i> .....	....	2	1,500	1,502
<i>Laurus camphora</i>	100	2,017	20,000	22,117
<i>Leucadendron argenteum</i>	2,000	25	5,000	7,025
<i>Liriodendron tulipifera</i> .....	....	....	28	28
<i>Lycium horridum</i> .....	....	1,175	....	1,175
<i>Melaleuca leucadendron</i>	900	100	....	1,000
" <i>ericifolia</i> .....	....	800	700	1,500
" <i>styphelioides</i> .....	....	385	300	685
<i>Melia azadirachta</i> .....	....	250	700	950
<i>Morus alba</i>	1,000	1,000	3,500	5,500
" <i>nigra</i> .....	....	....	30	30
<i>Olea capensis</i> .....	....	....	500	500
" <i>Europea</i> .....	....	....	250	250
<i>Olinia capensis</i> .....	....	....	4,000	4,000
<i>Oreodaphne bullata</i> .....	....	....	74	74
<i>Phytolacca dioica</i> .....	....	400	300	700
<i>Pinus Austriaca</i> .....	....	....	2,500	2,500
" <i>Canariensis</i>	250	2	....	252
" <i>excelsa</i> .....	....	....	100	100
" <i>Halepensis</i> .....	....	1,625	10,500	12,125
" <i>insignis</i>	7,400	488	24,000	31,888
" <i>Laricio</i>	3,000	....	10,500	13,500
" <i>longifolia</i>	100	....	1,200	1,300
" <i>pinaster</i>	2,000	....	6,000	8,000
" <i>pinex</i>	3,000	200	5,000	8,200
Carry forward.....	115,512	84,916	283,250	483,678

NURSERY LIST—continued.

Variety.	Planted at Tokai.	Distrib- uted.	Stock still in Nursery.	Total.
Brought forward.....	115,512	84,916	283,250	483,678
<i>Pinus Sinensis</i>	9,240	368	....	9,608
„ <i>Strobilus</i> .....	....	....	630	630
„ <i>sylvestris</i>	7,000	52	8,000	15,052
<i>Platanus occidentalis</i>	12	505	875	1,392
<i>Populus fastigiata</i>	2,000	....	4,500	6,500
„ <i>monilifera</i>	100	6,080	2,300	8,480
<i>Podocarpus elongatus</i> .....	....	....	6,000	6,000
„ <i>Thunbergii</i> .....	....	2	4,625	4,627
<i>Pteroxylon utile</i>	100	2	3,000	3,102
<i>Quercus cerris</i> .....	....	....	20	20
„ <i>nigra</i> .....	....	....	25	25
„ <i>pedunculata</i> .....	....	45	60,045	60,045
„ <i>suber</i> .....	....	....	370	370
<i>Rhus Thunbergii</i> .....	....	....	1,000	1,000
<i>Robinia pseudo-acacia</i> .....	....	....	4,000	4,000
<i>Sapindus marginata</i> .....	....	25	25	50
<i>Schotia latifolia</i> .....	....	....	20	20
<i>Sophora Japonica</i> .....	....	....	500	500
<i>Stereulia diversicolor</i> .....	....	25	140	165
„ <i>spec</i> : .....	....	25	70	95
<i>Taxodium distichum</i>	1,000	5,400	30,000	36,400
<i>Tectona grandis</i> .....	....	....	5	5
<i>Thea Chinensis</i> .....	....	....	50	50
<i>Tilia Europea</i> .....	....	....	250	250
<i>Trichilia Ekebergia</i> .....	....	....	30	30
<i>Tristania conferta</i> .....	....	12	2,000	2,012
<i>Ulmus campestris</i> .....	....	2	420	422
<i>Wellingtonia gigantea</i> .....	....	....	420	420
<i>Widdringtonia juniperoides</i>	1,304	103	100	1,507
Total.....	136,268	975,62	412,625	646,455

(3.)—CAPE GOVERNMENT RAILWAYS.

Specimens of Colonial Wood, Exhibited by the Railway Department.
(JNO. BROWN, Resident Engineer.)

Portion of	Ironwood	Sleeper after 10 years wear.
"	Black Stinkwood	" 8 "
"	"	" 10 "
"	Colonial Oak	" 14 "
"	"	" 14 "
"	"	" 20 "
"	White Stinkwood	" 8 "
"	"	" 8 "
"	White Pear	" 3 "
"	Saffron wood	" 3 "
"	Red Assegai wood	" 19 "
"	White Do.	" 19 "
"	Camphor wood	" 21 "

Parquetry-top Table made of the above woods, being portions of old sleepers.

3 Half-sleepers yellowwood creosoted in the Colony.

3 " " treated with chloride of zinc.

- (4). HERBARIUM.—Botanical specimens of the principal trees of the Eastern Forests.

Collected and prepared by D. E. Hutchins, Conservator of Forests, King William's Town.

- (5). HERBARIUM.—Botanical specimens of the principal trees of the Knysna forests.

Collected and prepared by F. G. Fourcade, Forest Department, Knysna.

- (6). Collection of Bark of some of the Knysna forest trees.

Collected by J. Cooper, Forest Department, Knysna.

- (7). Berries of seventeen species preserved in spirits. From the King William's Town forests.

Collected by D. E. Hutchins.

- (8). EUPHORBIA JUICE.—Prepared by D. E. Hutchins.

Commercially known as Euphorbia Gum. The specimens have an odour of Caoutchouc, and have been prepared similarly to that substance, viz., the juice was collected in bottles, allowed to harden, and then cut into slices and dried. The samples marked A remained three months in bottle, and those marked B only one month. Euphorbia juice is sometimes used locally (King William's Town) to destroy corns, and as a blister; also by thieves to obliterate the marks on stolen stock. Euphorbia juice rubbed on

an animal's hide turns the hair white. Occasionally horses rubbing their flanks against the stiff cactus like branches acquire white streaks on their coats, the hair becoming blanched where the Euphorbia juice has acted. May prove to be a valuable substitute for India Rubber. Very abundant in many parts of the Colony.

- (9). FIBRES of the following plants made into rope. Ganua, Blauwkeur, Roootouw, and Stock rose in a natural state.

Contributed by Mr. Bromley, Public Works Department, Storm's River.

- (10). Model of Timber wagon used at Knysna.

- (11). SNEEZEWOOD SOCKET or shoe, used in a 50 H. P. Turbine for 10 years at the Waterford Mills.

Contributed by J. J. Irvine, Waterford, near King William's Town.

- (12). BOWLS, LADLES, WALKING-STICKS, carved by Bushmen at Storm's River Convict Station.

Contributed by Dr. Kingston.

- (13). Walking Sticks, made by Fingoes in the King William's Town Division.

- (14). Collection of Knysna Forest Birds.

Contributed by W. Hare, Knysna.

Horned Owl		<i>Bubo Maculoeus.</i>
Crested Eagle		
Plumed Egret		<i>Ardea Egretta.</i>
King Fisher	Large Grey	<i>Ceryle Maxima.</i>
"	Speckled	<i>Ceryle Rudis.</i>
"	Blue Crested	<i>Alcedo Cristata.</i>
"	Scorpion Eater	<i>Halcyon Fuscicapilla.</i>
Horn Bill	Locust Eater	<i>Buceros Coronatus.</i>
Touraco	Louri	<i>Turacus Persa.</i>
Trogon	Bush Louri	<i>Apaloderma Narina.</i>
Bee Eater	Berg Swavel	<i>Merops Apiaster.</i>
Shrike	Kanalibyster	<i>Laniarius Ferrugineus (?)</i>
"	Muff Back	" <i>Cubla.</i>
"	"	" <i>Rubiginosus.</i>
"	Name unknown	
"	Bush Shrike	
Drongo Shrike	Kata Kooroo	<i>Dicrurus Musicus.</i>
Caterpillar Catcher	Blue Kata Kooroo	<i>Campephaga Levaillantii.</i>
Goat Sucker	Night Hawk	<i>Caprimulgus Smithii.</i>
Cuckoo	Piet-myn-vrouw	<i>Cuculus Solitarius.</i>
"	Diedrik	<i>Chalcites Amatus.</i>
"	Golden Cuckoo	" <i>Smaragdinus.</i>

Cuckoo . . .	Mettje . . .	<i>Chalcites Klaasii.</i>
" . . .	New Year's Bird . . .	<i>Oxylophus Edolius.</i>
Honey Guide . . .	" . . .	<i>Indicator Minor.</i>
Hoopoe . . .	" . . .	<i>Upupa Minor.</i>
Chatterer . . .	Kakkelaar . . .	<i>Irisor Erithrorhynchus.</i>
Sugar Bird . . .	Black . . .	<i>Nectarinia Amethystina.</i>
" . . .	Larger Red Breast . . .	" <i>Afra.</i>
" . . .	Smaller " . . .	" <i>Chalybea.</i>
" . . .	Green . . .	" <i>Famosa.</i>
" . . .	Orange Breast . . .	" <i>Violacea.</i>
" . . .	Widow Bird . . .	<i>Promerops Caffer.</i>
Cape Oriole . . .	Jan Lui . . .	<i>Drymoica Africanus.</i>
Kaffir Finch . . .	Peo . . .	<i>Oriolus Capensis.</i>
Fly Catcher . . .	Kol Fink . . .	<i>Ploceus "</i>
Wood Pecker . . .	Paradise Fly Catcher . . .	<i>Ichitrea Cristata.</i>
" . . .	Red Head . . .	<i>Dendrobates Griseocephalus.</i>
Roode Beekie . . .	Red Tail . . .	" <i>Fulviscapus (?)</i>
Spreo . . .	Red Rump . . .	<i>Estrela Dufrenoyi.</i>
Yellow-beaked Bush Bird . . .	" . . .	<i>Inida Morio.</i>
Copper Dove . . .	" . . .	<i>Peristera Larvata.</i>
Diver . . .	" . . .	
Daag Brecker . . .	" . . .	
Vlei Louri . . .	" . . .	
Grass Bird . . .	" . . .	
Java Sparrow . . .	" . . .	A Cage Bird escaped.
Coly . . .	Mnio Vogel . . .	<i>Colino Striatus.</i>

FURNITURE.

175. Cape Commission.

Bed-room Suite by Messrs. D. Isaacs & Son, of Capetown, in yellow-wood, with stinkwood (*Oreodaphne bullata*) decoration, comprising :—

Breakfront wing wardrobe, dressing-table with cheval glass, dressing-table, bedside cupboard, towel horse, 3 chairs.

176. Isaacs, D. and Co. CAPETOWN.

- (1.) Laurel wood (*Oreodaphne bullata*) frame Dining-room Suite, comprising :—

Sideboard, table, dinner wagon, mantel board, couch, 6 stuffed back chairs, and ladies' and gentleman's easy chairs, upholstered in morocco leather.

- (2.) Process of turning woods.

177. Kafir Institution. . GRAHAM'S TOWN. (Principal: Rev. Canon MULLINS.

- (1.) Chippendale sideboard, in black stinkwood, French polished.

The wood selected from planks from the Kaysna forest. Made by Jacob Stewart, Carpentry Instructor to the Institution.

- (2.) Suite of Bed-room furniture, Gothic, in yellow-wood, consisting of:—

Wardrobe, chest of drawers, toilet table and mirror, washstand, pedestal, towel horse, and 2 chairs.

- (3.) Suite of Bed-room furniture, Mediæval, in essen (ash) wood framing, and white els (alder) pannelling, consisting of same number and description of pieces as No. 2 Suite.
- (4.) Portable Table in essen wood, polished.
- (5.) Portable Table in white els, polished.

All the wood employed for the above furniture is from the Knysna Forest, and has been manufactured entirely by the native apprentices of the Institution.

Lovedale Missionary Institute. ALICE.

House and School furniture, specimens of wood-turning, wheelbarrows, &c.

(See under *Native Department.*)

178. Michell, L. CAPETOWN.

Table of Colonial woods, made at Swellendam.

CARTS, WAGONS, &c.

180. Brink, Adrian Smuts. PAARL.

Cape Cart; Four Seated, hung on three Springs, Folding Hood.

Body and shaft, stinkwood; panels, mahogany; naves, yellow-wood; spokes, assegai; felloes, stinkwood.

181. Clarke, W. BEDFORD.

Colonial Transport Wagon Wheels, Hind and Front Spokes.

Load of Wagon, 9,000 lbs.

Cart Spokes.

Gig Spoke, hand-made of Assegai wood, from Maarstrom Forest.

182. Cooper, William Collins CAPETOWN.

Cape Travelling Cart, entirely of Colonial workmanship.

Broken Nave of Wheel, showing method of repairing employed "on trek" in Damaraland.

183. Quick and Thorogood. PORT ELIZABETH.

Model of Half-tent Traders' Wagon of Colonial wood.

The tent bows, laths, and sides are stinkwood; the frame, yellow-wood; panels and plank on top of sides, saffron-wood; buck beam, cross-bar, brake-bar, front-bar, and rails, stinkwood; plank rails and bed planks,

NURSERY LIST—continued.

Variety.	Planted at Tokai.	Distrib- uted.	Stock still in Nursery.	Total.
Brought forward.....	88,551	55,232	124,267	268,050
<i>Erythrina caffra</i>	10	10	100	120
<i>Fabricia laevigata</i> .....	....	....	6,000	6,000
<i>Fraxinus excelsior</i> .....	....	....	20	20
<i>Frenela australis</i> .....	....	25	340	365
<i>Gleditschia triacanthus</i> .....	....	300	1,000	1,300
<i>Gonioma Kamassi</i> .....	....	....	512	512
<i>Grevillea robusta</i>	7,200	2,650	3,500	13,350
<i>Grewia spec:</i> .....	....	....	3	3
<i>Haematoxylon campechianum</i> .....	....	....	700	700
<i>Hakea suaveolens</i> .....	....	18,225	50,000	68,225
<i>Harpephyllum caffrum</i>	1	....	2	3
<i>Juglans nigra</i> .....	....	5	4	9
<i>Juniperus Virginiani</i> .....	....	....	100	100
<i>Kydia calycina</i> .....	....	....	20	20
<i>Larix Europea</i> .....	....	2	1,500	1,502
<i>Laurus camphora</i>	100	2,017	20,000	22,117
<i>Leucadendron argenteum</i>	2,000	25	5,000	7,025
<i>Liriodendron tulipifera</i> .....	....	....	28	28
<i>Lycium horridum</i> .....	....	1,175	....	1,175
<i>Melaleuca leucadendron</i>	900	100	....	1,000
" <i>ericfolia</i> .....	....	800	700	1,500
" <i>styphelioides</i> .....	....	385	300	685
<i>Melia azadirachta</i> .....	....	250	700	950
<i>Morus alba</i>	1,000	1,000	3,500	5,500
" <i>nigra</i> .....	....	....	30	30
<i>Olea capensis</i> .....	....	....	500	500
" <i>Europea</i> .....	....	....	250	250
<i>Olinia capensis</i> .....	....	....	4,000	4,000
<i>Oreodaphne bullata</i> .....	....	....	74	74
<i>Phytolacca dioica</i> .....	....	400	300	700
<i>Pinus Austriaca</i> .....	....	....	2,500	2,500
" <i>Canariensis</i>	250	2	....	252
" <i>excelsa</i> .....	....	....	100	100
" <i>Halepensis</i> .....	....	1,625	10,500	12,125
" <i>insignis</i>	7,400	488	24,000	31,888
" <i>Laricio</i>	3,000	....	10,500	13,500
" <i>longifolia</i>	100	....	1,200	1,300
" <i>pinaster</i>	2,000	....	6,000	8,000
" <i>pinex</i>	3,000	200	5,000	8,200
Carry forward.....	115,512	84,916	283,250	483,678

NURSEY LIST—continued.

Variety.	Planted at Tokai.	Distrib- uted.	Stock still in Nursery.	Total.
Brought forward.....	115,512	84,916	283,250	483,678
<i>Pinus Sinensis</i>	9,240	368	.....	9,608
„ <i>Strobus</i> .....	.....	.....	630	630
„ <i>sylvestris</i>	7,000	52	8,000	15,052
<i>Platanus occidentalis</i>	12	505	875	1,392
<i>Populus fastigiata</i>	2,000	.....	4,500	6,500
„ <i>monilifera</i>	100	6,080	2,300	8,480
<i>Podocarpus elongatus</i> .....	.....	.....	6,000	6,000
„ <i>Thunbergii</i> .....	.....	2	4,625	4,627
<i>Pteroxylon utile</i>	100	2	3,000	3,102
<i>Quercus cerris</i> .....	.....	.....	20	20
„ <i>nigra</i> .....	.....	.....	25	25
„ <i>pedunculata</i> .....	.....	45	60,000	60,045
„ <i>suber</i> .....	.....	.....	370	370
<i>Rhus Thunbergii</i> .....	.....	.....	1,000	1,000
<i>Robinia pseudo-acacia</i> .....	.....	.....	4,000	4,000
<i>Sapindus marginata</i> .....	.....	25	25	50
<i>Schotia latifolia</i> .....	.....	.....	20	20
<i>Sophora Japonica</i> .....	.....	.....	500	500
<i>Sterculia diversicolor</i> .....	.....	25	140	165
„ <i>spec</i> : .....	.....	25	70	95
<i>Taxodium distichum</i>	1,000	5,400	30,000	36,400
<i>Tectona grandis</i> .....	.....	.....	5	5
<i>Thea Chinensis</i> .....	.....	.....	50	50
<i>Tilia Europea</i> .....	.....	.....	250	250
<i>Trichilia Ekebergia</i> .....	.....	.....	30	30
<i>Tristania conferta</i> .....	.....	12	2,000	2,012
<i>Ulmus campestris</i> .....	.....	2	420	422
<i>Wellingtonia gigantea</i> .....	.....	.....	420	420
<i>Widdringtonia juniperoides</i>	1,304	103	100	1,507
Total	136,268	975,62	412,625	646,455

176. $1\frac{1}{2}$ miles from junction of Orange and Vaal Rivers (Glaciated rock surface).
 177. "Balloch," near "Kloof," Griqualand West.

TABLE MOUNTAIN SANDSTONE.

- F 1. South side of Zwartberg Pass, near Prince Albert.
 2. Piquetberg Road Station.
 3-8. South side of Zwartberg Pass, near Prince Albert.
 9-21. Mitchell's Pass, near Ceres.
 22-23. Uitkyk Station, Zwartberg Pass.
 24. South side, Zwartberg Pass.

BOKKEVELDT BEDS.

- G 1-20. Railway Ascent, Hex River.

ZUURBERG BEDS.

- H 1-10. Touws River Station.
 11-12. North side of Zwartberg Pass.
 13-15. Graham's Town.
 16. West Hill, Graham's Town.
 17. Near Rubidge's Farm, Graham's Town.

LOWER KARROO BEDS.

- I 1, 3. Buffels River Western Railway.
 2. Vaal River, Mazel Fontein, near Junction with Orange River.
 4. Bank of Vaal River, close to house, Mazel Fontein, junction of Orange and Vaal Rivers.
 5. 5 miles west of house, Mazel Fontein, junction of Orange and Vaal Rivers.
 6, 8, 11-15, 17, 22-25. Buffel's River, near bridge, Western Railway.
 7. Schmidt's Drift, Vaal River.
 9, 26. 2 miles west of Cradock.
 10. Dwyka conglomerate, 3 miles below house, Mazel Fontein, junction of Orange and Vaal Rivers.
 16, 18-21. 2 miles south-west of Cradock.
 27. $1\frac{1}{2}$ miles west of Cradock.
 28, 31-33, 36-39, 43, 45. Kokstad.
 29, 30, 34, 35, 44. 2 miles west of Kokstad.
 42. 2 miles south-west of Kokstad.
 46, 47. 2 miles south of Kokstad.
 48, 49, 51, 62. Junction Riet and Modder Rivers.
 50, 51. Hope Town.
 52-57, 59, 61. Between Prince Albert and Prince Albert Road Station.
 60. Matge's Fontein, Western Railway (Dwyka conglomerate).
 63. Schmidt's Drift.
 64. About 15 miles west of Kimberley road to Schmidt's Drift.
 65-69. Du Toits Pan, Diamond Fields (shales from wall of so-called reef).
 70-81. Bultfontein, Diamond Fields.
 82-97. De Beer's " "
 98-124. Kimberley " "
 100-124. Kimberley Diamond Fields.
 125. Junction of Orange and Vaal Rivers.
 126. 22 miles west of Kimberley.
 127. Ripple marked slab from Hope Town.
 128. In the shales or "Reef" Kimberley Mine.
 129-130. Kimberley Mine "Reef."

LOWER KARROO BEDS (GLACIAL CONGLOMERATE).

- II 1. Matjesfontein Western Railway.
 2. 3 miles below junction Orange and Vaal Rivers N. side.
 3. 2 miles from junction Riet and Modder Rivers towards Kimberley.
 4. De Beer's Mine Diamond Fields.
 5. 6 miles above junction of Vaal and Orange Rivers, on Orange River, "Mark's Drift."
 6. Hope Town.
 7. Eland's Fontein, near Griquatown.
 8. Railway cutting Graham's Town (Altered).
 9-10. Grahamstown.
 11-12. Pebble from glacial conglomerate Hope Town.
 13-15. " " " 1½ miles from house Mazel Fontein.
 16, 19. " " " Hope Town.
 17-18. " " " Tweefontein, junction of Diep and Orange Rivers.
 20-21. " " " Tweefontein, Diep River.
 22. " " " 1½ miles north-west from Junction of Orange and Vaal Rivers.

UPPER KARROO BEDS.

- J 1-7, 9-16. Fraserburg Road Station.
 8, 17-33, 41-42. Nieuwveldt Mountains, near Beaufort West.
 34-35. Prince Albert Road Station.
 36-40. Olie Fontein, between Umzimvubu River and Kokstad (Matatiele Road.)

MOLTENO COAL MEASURES.

- K1. 1. Pot River, Road from Uguie to Mt. Fletcher, Transkei.
 2. Tsitsa River " "
 3. Pot River, 6 miles north-east of Maclear. "
 4, 8-12. Mount Fletcher.
 5. Ugie.
 6. Pot River.
 7. Tsitsa River.
 13-17, 30, 31. Drie Fontein (Clarke) via Brak Laaghte between Dordrecht and Indwe.
 18, 52, 54. Striyp Poort near Dordrecht.
 19, 51, 55. Botha's Hoek "
 20-22, 47-50, 56-59. Coffee Fontein near Dordrecht.
 23-24, 32, 43, 45, 46. Common, Aliwal Road, Dordrecht.
 25-26, 44. Nana Poort, near Dordrecht.
 27-28, 33-42. Drie Fontein near Brak Laaghte.
 29. " " under dolerite sheet.
 60. Conglomerate, " above Mine, Indwe.
 61. Vlaakte Fontein "
 62. Columnar Sandstone, Spijven Kop, near Indwe.
 63-68. 2½ miles east of Indwe Mine.
 69. Swenna Poort, near Dordrecht, valuable for stoneware.
 70. " " same, subjected to heat.
 71. Dordrecht Quarries.
 72, 73, 79. Vlaakte Fontein, near Indwe.
 74, 76-78, 80, 82. Dordrecht.
 75, 81. Spijven Kop, near Indwe.
 83-84. Black shale, Indwe Coal Mine.
 85-87. Roof, Indwe Coal Mine.

STORMBERG BEDS.**RED BEDS.**

- K3.** 1-2, 11, 12, 16, 19-24, 28, 29, 32, 33. Spijven Kop, near Indwe.
 3, 4, 13-16, 18. Jonah's Hoek.
 5, 6, 8, 9. Spijven Kop.
 7, 10. Jonah's Hoek.
 17, 30, 31. Drie Fontein, near Brak Laaghte.
 25-27. Drie Fontein (Clarke) near Brak Laaghte.

CAVE SANDSTONE.

- K3.** 1-6. Jonah's Hoek, near Indwe.

VOLCANIC BEDS.

- K4.** 1-8. Xalanga Peak, near Indwe.

SUNDAY RIVER BEDS.

- L** 1, 5. Highest woolwash, Zwartkops River, above Uitenhage.
 6. Oudtshoorn Township.

TERTIARY.

- M** 1, 2. Mulder's Vley Junction.

RECENT.

- N** 1. Farm "Beaconsfield," about 30 miles east of Daniel's Kuil, Griqualand West.
 2. Vlakke Fontein, near junction of Orange and Vaal Rivers.
 3. Griquatown.
 4, 5. Foot of Campbell Randt, near junction of Diep and Orange Rivers.
 6. Hope Town.
 7. 3 miles east of Griquatown.
 8. 5 miles west of junction Vaal and Orange Rivers.
 9. 5 miles north-east from Tweefontein junction, Orange and Diep Rivers.
 10. 6 miles " " "
 11. Bultfontein Diamond Fields, "Tufaceous limestone. " "
 12. Zwartkops Station, near Port Elizabeth.
 13. Near Elands Fontein, 15 miles from Griquatown.
 14. Elands Fontein.
 15. Junction Riet and Modder Rivers.
 16. Campbell.
 17. Bultfontein.
 18. Tweefontein junction, Diep and Orange Rivers.
 19, 20. Junction of Orange and Vaal Rivers.
 21. Kafir Krans, near "Kloof," Griqualand West.

IGNEOUS ROCKS.

- O** 1. 2 miles south of Kokstad.
 2, 6. Kokstad.
 3. Olie Fontein, west of Kokstad.
 4. Tsitsa River road, past Mt. Fletcher.
 5. Umzimvubu River, road from Matatiele to Kokstad.
 7. Tsitsa River.
 8. Railway Bridge, Orange River.
 9. Round House, Kloof Road, Capetown.
 10, 12. Nieuwveldt Mountains, Beaufort West.
 11. Beaufort West Dam.

- 13, 25. Kaffir Krans, near "Kloof," Griqualand West.
14. Campbelltown, Griqualand West.
15. Kookhuis, 10 miles east of Griquatown.
- 16, 22, 26. Middel Plaats, road between Griquatown and Prieska.
- 17, 18. Vlakke Fontein, near junction of Orange and Vaal Rivers.
- 19, 29. 4 miles below house, Mazel Fontein.
- 20, 28. Junction Riet and Modder Rivers.
21. Vogel Vley, Western Railway.
23. Pebble from Glacial Conglomerate, Twee Fontein, Diep River, junction with Orange River, Griqualand West.
24. Between Schmidt's Drift and Kimberley.
27. Stim Fontein, few miles east of Daniel's Kuil.
- 30-49. "Hard Rock," Amygdaloid (Diabase), Kimberley.
- 50, 51. Dolerite from side of Mine, Kimberley.
52. " " " Bultfontein.
53. Dolerite boundary of Mine, Du Toit's Pan.
- 54, 55. " " " De Beer's.
56. " " " Kimberley.
- 57-62, 75, 76, 78. From within the Mine, Du Toit's Pan.
- 63, 64, 67, 71. " " " De Beer's.
- 64a, 66, 68. " " " Kimberley.
- 69, 70, 72-74, 77. " " " Bultfontein.
79. Dyke in Glacial Conglomerate, Diep River, junction of Orange and Diep Rivers, Griqualand West.
- 80, 88. 2 miles west of Cradock.
- 81, 85. 1½ " " "
- 86, 87. 24 miles west of Kokstad (Remarkable site—looks like volcanic flow).
89. Kimberley Mine, wall of.
92. De Beer's Mine Diamond Field's.
91. Bultfontein Mine, Included fragments within the Mine.
- 92, 93, 95. Included fragments, Kimberley Mine.
94. " " " Bultfontein Mine.
- 96, 97. Dordrecht.
- 98, 102. Coffee Fontein, near Dordrecht.
99. Dyke cutting coal seam, Indwe Mine.
100. Drie Fontein, near Brak Laaghte, near Indwe (lateral sheet).
101. Spijven Kop, near Indwe.
103. Drie Fontein, near Brak Laaghte.
104. Namo Poort, near Dordrecht.
105. Jonah's Hoek, near Indwe.
106. Riet Spruit, near Indwe.

MINERALS.

- I. Allanite from Colesberg.
- II. Ilmenite from Stenikopf, Namaqualand.

DIAMONDS, DIAMOND MINING, CUTTING AND POLISHING.

191. Cape Commission.

The entire process of diamond mining, washing, sorting, cutting, and polishing. The blue-ground has been placed at the disposal of the Cape Commission by various Mining Companies at Kimberley, De Beers, Dutoitspan, and Bultfontein through the Kimberley Local Committee. The washing and sorting machinery, which is of the type in daily use at the Diamond Fields, as well as the small vertical engine driving it, have been lent to the Commission by Messrs. Davey, Paxman & Co., and the cutting, polishing and setting is illustrated at the request of the Commission by Messrs. Ford & Wright, of Clerkenwell Green.

192. Kimberley Local Committee **KIMBERLEY.**

1. Diamonds in the rough and matrix, exhibited by—
 - (a). The French Diamond Mining Company, Kimberley.
 - (b). De Beers Diamond Mining Company, De Beers.
 - (c). Phoenix Diamond Mining Company, Dutoitspan.
 - (d). French and D'Esterre Diamond Mining Company, and Bultfontein Mining Company, Bultfontein.
2. Model, shewing a sectional block of the Kimberley Mine in 1873. "Road VI." representing about 1-20th part of the total claim ground of the Mine. About one hundred separate hauling gears (each worked by four natives) are shewn, the average daily output from each gear being from 7 to 10 cart loads of 16 cubic feet. Greatest depth of Mine was about 100 feet.—Scale 1 inch represents 4 feet.
3. Model of a Cradle ripple washing machine which replaced dry sorting in 1874, and was followed by rotary machines in 1875.—Scale 1 inch represents 2 feet.
4. Model of Horse-whim first used in 1874, for hauling ground from the Diamond Mines of Griqualand West, with tubs of about 3 cubic feet capacity and an output of from 40 to 50 cart loads per diem. Several hundred whims were in use at the four mines in 1877, after which time they were gradually replaced by steam engines.—Scale 1 inch represents 1 foot. Actual depth of claims about 200 feet.
5. Working model, shewing a sectional block of a portion of the claims of the Griqualand West Diamond Mining Company, Dutoitspan Mine, with arrangement of hauling-gears in use in 1885. Average daily output by the "tub gear" equals 750 loads, and by the "sling gear" equals 650 loads of 16 cubic feet.
 Scale.—1 inch equals 1 foot.
 Actual depth of claims about 200 feet.

6. Working Model of a complete Washing Gear, with Pulsator, &c., for treating diamondiferous ground representing some of the machinery of the Griqualand West Diamond Mining Company, Dutoitspan Mine, in 1885. Scale 1 inch represents 1 foot.
7. Working Model of an improved Gravitation Washing Machine designed by C. A. Blackbeard, Managing Director of the Griqualand West Diamond Mining Company, Dutoitspan. Scale 1 inch represents 1 foot.
8. Model of the Bultfontein Diamond Mine, Griqualand West, in 1885, showing with completeness the aerial hauling-gears as existing, a portion of the depositing floors, and the complete washing gear of the Bultfontein Mining Company.

During the year two million loads, approximately, of diamondiferous ground were hauled, yielding about 500,000 carats of diamonds, valued at over half a million pounds sterling. The deepest workings in the mine have reached a depth of nearly 300 feet from the surface. The daily output of one hauling-gear approaches 750 loads of 16 cubic feet. Scale of Mine, &c., is $\frac{1}{8}$ in. to the foot. Scale of Washing Gear is $\frac{1}{2}$ in. to the foot.

9. Collection of Geological and Mineralogical Specimens :—

From the Kimberley Mine, collected by French D. M. Co., Standard D. M. Co., F. Schute.

From De Beer's Mine, collected by C. D. Rudd, F. Oats, J. Peaceful.

From Dutoitspan Mine, collected by C. H. Blackbeard, F. Schute.

From Bultfontein Mine, collected by C. F. B. Wollaston and F. Schute.

10. Four Sectional Drawings by K. Tucker and W. C. Davies of the Diamond Mines of Griqualand West, based on surveys made in November, 1885, together with Four Supplementary Geological Charts by F. Schute.

(A and a) Kimberley Mine.

Shewing Geological features of the surrounding shales or "reef," and the "hard rock;" also the open and underground workings of the mine. Scale 1 inch equals 20 feet.

(B and b) De Beer's Mine.

Showing Geological features of the surrounding reef, the "floating" reef, and the workings in the mine. Scale 1 inch equals 15 feet.

(C and c) Dutoitspan Mine.

Showing Geological features of the surrounding reef, the high ground and the working of the claims in the mine. Scale 1 inch equals 15 feet.

(D and d) Bultfontein Mine.

Showing Geological features as now proved, and as existing at the opening of the mine in 1871. Scale 1 inch equals 15 feet.

11. Four Drawings, by K. Tucker, showing ownership of claims in Diamond Mines of Griqualand West, viz.:—

(A) Kimberley Mine in 1881.

(B) Kimberley Mine in 1882.

(C) Dutoitspan Mine in 188

(D) Bultfontein Mine in 188

12. Photographs.

1. Plans of Ownerships in the several Diamond Mines.
2. General View of Kimberley.
3. Views of Kimberley and Dutoitspan Mines, 1885.
4. Views of Vaal River and Barkly, 1885.
5. Bultfontein Mine and Machinery.
6. Kimberley Mine, 1883-85.
7. Kimberley—drysorting, 1874; platelaying, 1885.
8. Kimberley Mine, 1874-76; Sorting and River Diggings, 1880.
9. Kimberley Mine, 1883-85.
10. Plan of Ownerships in Kimberley Mine, 1876-82; in Bultfontein Mine, 1885.
11. De Beer's and Dutoitspan Mines in 1872-85.
12. Views of Kimberley Market Square, Barkly Bridge.
13. Kimberley Mine; "The Roads" in 1872, and View in 1883.
14. Views at Vaal River in 1884.

193. Hill and Paddon CAPE COLONY.

Diamonds in the rough, from the River Diggings, near Barkly West.

Pebbles from River Diggings.

CROCIDOLITE.**195. Cape Commission.**

Samples of Crocidolite, collected for the Commission, by Mr. E. J. Dunn, F.G.S.

196. Harris, Elias DU TOIT'S PAN.

- (1.) Crocidolite, in the rough, and cut and mounted in various forms.
- (2.) Asbestos.
- (3.) Crystal Amethyst.

Found in Griqualand West.

197. Harris, Lehmann and Co. KIMBERLEY.

- (1.) Crocidolite, in the rough.
- (2.) Crocidolite, polished in slabs.
- (3.) Crocidolite, polished and manufactured into jewellery, buttons, &c.

Found on Asbestos Mountains, in the district of Hay, Griqualand West.

198. Joseph and Gluckstein VICTORIA WEST.

Crocidolite, in the rough: also the operation of dressing, turning, and manufacture, showing its usefulness for fancy umbrella-handles, trinkets, and other purposes.

199. Lillienfeld, Bros. HOPE TOWN.

Specimens of Crocidolite.

Process of Cutting and Polishing.

200. Paton, Theophilus. . . . SWINLEES, DALRY, AYRSHIRE.

Specimens of Crocidolite, and the process of Cutting and Polishing.

COAL.

202. Cyfergat Coal-mining Company.

CYFERGAT, NEAR BURGHERSDORP.

Section cut from the Coal Seams worked in the Cyfergat Mine.

The seams worked are 8 inches, 4 inches, and 17 inches in thickness respectively, separated by thin beds of shale, making a total thickness of 29 inches of coal. An upper seam, 7½ inches thick, is left to form the roof of the workings.

The Coal is of an excellent quality for Railway and Household purposes. Output for year ending June 30th, 1885, 7,033 tons.

203. Fairview Coal Mine. FAIRVIEW.

(Proprietor, J. J. Von Straaten; Manager, W. F. Hallimond).

Section of Coal Seams worked at the Fairview Mine.

Commencing from the top the Section shows: Inferior Coal, 6 inches, which is left for roof; Top Seam, 8 inches; Shale, 4 inches; Middle Seam, 4 inches; Shale 4 inches; Bottom Coal, 15 inches, of which the lower 2½ inches consists of a coal of superior quality suitable for smiths. The quantity of coal worked during the past twelve months is 3,000 tons. It is sold at the Mine at the rate of 17s. per ton.

A rough estimate of the extent of the deposit on this farm shows a coal-bearing area of nearly 700 acres, which, supposing it to be of the Section described, would yield nearly 2,000,000 tons. The working of the Mine having only recently been commenced on a proper system the output at present is small, but it is estimated that in three months' time 500 to 600 tons could be put out per month.

204. Indwe Coal-mining Company. INDWE.

(Manager, James M. Weir).

- (1) Section of the Indwe Mine; (2) Section of the Coal Seams worked; (3) Specimens of the Roof, Sandstone and Coal, from each Seam; Clay, Shale, and Fossils.

Commencing from the Sandstone Roof, the Section shows: Coal, 6 inches; Shale and Batt, 7 inches; Good Coal, 6 inches; Shale, 13 inches; Coal, 2 feet 4 inches, with ½-inch band of Shale 6 inches from bottom; Shale, 9 inches; Coal, 10 inches, making a total of 50 inches of Coal.

205. Vice, George. MOLTENO.

- (1.) Section of Coal Seams worked at the Molteno Mine.

Commencing from the Sandstone Roof, 40 feet in thickness, the Section

shows: Coal, 6 inches; Shale, 6 inches; Coal, 10 inches; Shale, 10 inches; Coal, 14 inches; making a total thickness of 30 inches of Coal.

The estimate of the quantity of coal in district is about 40,000,000 tons.

- (2.) Fossils found in the Coal-bearing Strata.

SALT.

206. Hitzeroth, Bros. HITZEROTH'S PAN, NEAR UITENHAGE.

Salt of various qualities—superfine, fine, medium and coarse, from natural pan.

The Salt pan is 3 miles long, and 1 mile broad, of which a portion, 320 yards in length by 50 yards in breadth only is worked. The salt, which is very pure, is gathered direct into sheds without further treatment than raking and washing. At the opening of the season the coarse salt which is on the surface is first collected, the better qualities being lower in the deposit.

207. Stephan, Bros. CAPETOWN.

Salt, coarse and fine from Yzerfontein, near Capetown. From a natural pan producing about 10,000 bags per year.

See also Guano Exhibits.

COPPER ORES.

208. Cape Commission.

- (1.) Copper Ores exhibited by the Cape Copper Mining Company, Namaqualand.

(a) Twelve different varieties of dressed Copper Ores; (b) Specimens of Natural Ores of every variety; (c) Photographic views of the Copper Mines, the Railway, and Port Nolloth, Namaqualand.

- (2.) Copper Ores exhibited by the Namaqua Copper Mining Company. A case containing assorted specimens of dressed Copper Ores.

- (3.) Specimen of Copper from the Oitabi Mine, Damaraland.

209. Cape Copper Mining Company.

Samples of Copper Ore.

210. Namaqua Copper Co. O'OKIEP.

Specimens of Copper Ore.

211. Spence and De Pass. CAPETOWN AND LONDON.

Silver, Lead, and Copper Ores, from West coast of Africa.

Gold from Transvaal.

WROUGHT IRON WORK.

212. Vulcan Iron Works J. Lewis. PORT ELIZABETH.

Wrought-iron gates, proposed for the main entrance of the Port Elizabeth Market Buildings, 15 feet 6 inches high by 11 feet wide. Made entirely by the Exhibitor.
Details of manufacture.

STONE AND MARBLE.

213. Cape Commission.

- (1.) Granite, from the Paarl. Used in the construction of the graving dock, Capetown.
- (2.) Marble, from Troe Troe, division of Clanwilliam. Specimens of various descriptions.
- (3.) Sandstone or Freestone, from Mossel Bay, Plettenberg's Bay, Graham's Town, Dordrecht, Molteno, Burghersdorp, and Queen's-town, shaped according to instruction of Royal Commission.
- (4.) Millstone or Grindstone from Mossel Bay.

214. Maitland, James. GRAHAM'S TOWN.

Stones for building or ornamental purposes, of which an unlimited quantity can be procured.

215. Rusconi, August, MARAISBURG, CRADOCK.

Stone Monument, 9 feet high by 2 feet 8 inches at base. Manufactured by the Exhibitor at Maraisburg, Cradock, of stone quarried at that village.

216. Sewell, J.F. PLETTENBERG BAY, KNYSNA.

- (1.) Sample, Whitish Sandstone, with carved *Fleur-de-Lis*.
- (2.) Sample, coarser Sandstone, with carved representation of arms and inscription on the obelisk, erected at Plettenberg Bay, in 1778, by Baron von Plettenberg, Govenor of the Cape of Good Hope under the Dutch rule.
- (3.) Sample, coarse Sandstone.
- (4.) Samples of White and Red Clays.
- (5.) Yellow and Blue Clays.
- (6.) Sample of Surface Soil from the Flats.
- (7.) Slabs of Fossils found in the Sandstone formations, Knysna.

217. Anderson, W. G., Junr. CAPETOWN.

Stalactite—8 feet in length. Brought by ox wagon from a cave near Danger Point in the Caledon District.

218. Atherstone, Honourable W. G., M.L.C.

GRAHAM'S TOWN.

Petrified Wood.

CLAYS, KAOLINS.**219. Cape Commission.**Clays and Kaolin, a Collection of Specimens from various places,
viz. :—

- (a) Claremont Flats, contributed by E. J. Dunn.
- (b) Rondebosch, „ Thomas Bain.
- (c) Mowbray, „ T. E. Hare.
- (d) Roodebloem, „ W. Hare.
- (e) Klapmuts.
- (f) Kloof Potteries, Cape Town, contributed by W. F. Whittall.

220. Lucas, J. P. PORT ELIZABETH.

Specimens of Clays.

Sewell, J. F.

Specimens of Clays.

*See under Exhibit of Sandstones.***221. Arrow, J. PORT ELIZABETH.**Flower Pots, Fern Pans, Seed Pans, and other Articles made of
Colonial Clay.

MACHINERY (MINING).**222. Williams, Thos. David. . EAST LONDON, CAPE OF GOOD HOPE.**

Ore Stamper.

For reducing ores by steam power or compressed air direct, with special
boxing arrangements adapted to gold winning. Patented Sept. 1885,
Cape of Good Hope.**Kimberley Local Committee.**

Models of Machinery used in Diamond Mining.

See Exhibit of Diamond Washing by the Cape Commission.

MINERAL WATERS.

223. Cape Commission.

Specimens of Water from the various chalybeate and thermal springs of the Colony, collected and analysed for the Commission by Dr. P. D. Hahn, Professor of Chemistry in the African College.

PRINTING AND BOOKBINDING.

224. Richards, W. A. & Sons, Government Printers,

CAPETOWN.

Specimens of Printing and Binding.

225. Solomon, Saul & Co. CAPETOWN.

Samples of Bookbinding.

226. Juta, J. C. & Co. CAPETOWN.

Cape of Good Hope Civil Service List.

Lovedale Missionary Institute . . . ALICE.

Printing and Bookbinding by Natives.

See under Native Department.

FINE ART SECTION.

OIL PAINTINGS.

227. Crossman, Mrs. F. G. RONDEBOSCH.

Belladonna Lilies.

228. De Smidt, A., Surveyor-General. CAPETOWN.

Knysna Heads.

229. Falls, R. E. RONDEBOSCH.

Kalk Bay.

230. Fletcher, Mrs. Herbert. CAPETOWN.

(a) Wildflowers; (b) Fruit; (c) Cape Flats, Wynberg; (d) Wynberg Hill.

- 231. Ford, James, Master of School of Art.** CAPETOWN.
Studies of Fruit and Heath.
- 232. Leslie, Harry C., Master of School of Art, PORT ELIZABETH.**
(1) The Drift, Van Staaden's River ; (2) Zwartkop ; (3) Van Staaden's River.
- 233. Moore, Miss L.** WYNBERG.
Cape Wild Flowers.
- 234. Ross, Robert M.** CAPETOWN.
Two paintings of Cape Scenery, by the late Thomas Baines.
- 235. Schröder, W. H.** CAPETOWN.
Portrait of the late Bishop Colenso.
- 236. South African Fine Arts Association.** CAPETOWN.
(1) Knysna Forest, by W. Hermann ; (2) Sunset, Sea-point, by W. Hermann ; (3) Ostriches, Sunrise, by C. Rolando ; (4) Ostriches, Sunset, by C. Rolando ; (5) Table Mountain, from Newlands, by C. Rolando ; (6) Table Mountain, from Bight Court, by C. Rolando ; (7) Ox waggon, by W. McCallum.
- 237. Volschenk, J.** RIVERSDALE.
Montagu Pass.
- 238. White, Robert.** BRIGHTON, ENGLAND.
Collection of Paintings of Cape Scenery, Natives, Ceremonies, Customs, &c., by the late Thomas Baines.
(1) The Trader's Station, on the White Kei River.
(2) Exterior of Bushman's Cave at the foot of Eiland's Berg, Kat River.
(3) Interior of Bushman's Cave, Eiland's Berg, Kat River, February, 1850.
(4) Sandilli (the Paramount Chief of Kafirland) and some of his Councillors in the Canteen at Fort Cox.
(5) Karroo Veldt, between Cradock and Colesberg ; waggons outspanned.
(6) Walvisch Bay : Mr. Latham's house and fishing station ; effect of mirage on flocks of flamingoes, pelicans and distant objects. The appearance of water in the neighbourhood of the waggons is due to mirage, there being no water there.
(7) The Victoria Falls from the western end of the chasm, or the first point at which it is reached by the south road, including the "Leaping Water," or deepest channel on the west side.
(8) The eastern portion of the Victoria Falls, looking east from Garden Island, near the centre of the Falls.
(9) Buffalo Hunting in front of the Victoria Falls, opposite Garden Island.
(10) Scene near Aasvogel's Kop, Brandt Spruit's River. Herd of Gnus in the distance, herd of Blesboks in foreground.

- (11.) Kraal, or Residence of the Kafir Chief Sandilli, in the Amatola. Witches' Rock in the distance.
- (12.) The "Pitso," or Council of War, at Lake Ngami. The chief, Leskulatebi, in the chair. Makholoke speaking. The women clapping hands.
- (13.) Koobie, and Group of Bushmen, painted from life, at Koobie.
- (14.) The Camp of the 1st and 2nd Divisions, under the command of Major-General Somerset, at Butterworth, to the eastward of the Great Kei, January, 1852.
- (15.) Damara Family from Otjimbeague, South-west Africa, painted from life at Otjimbende.
- (16.) Namaqua Hottentots, of the Topenau Tribes spearing Land Fish and Sting Ray in the inner lagoon, Walvisch Bay; the fishery, and Mr. Anderson's house on the beach.
- (17.) Mackay's Nek and Kop, and Valley of the White Kei. Bushmen who think drawing is connected with sorcery.
- (18.) Wagons crossing the Drift, on the Great Fish River, two miles below Cradock.
- (19.) Crossing the Oorlog's Poort River. Tributary of the Orange River.
- (20.) Outspan at Van der Walt's Fontein, near Colesberg.
- (21.) Near the Kroomie River.
- (22.) Fort Cox on the Amatola Mountains. Kafir police at drill, painted from life.
- (23.) Drift at the Great Fish River, near Cradock.
- (24.) The attack on Fort Brown, and capture of the cattle by the rebel Hottentots and Kafirs, April 10th, 1851.
- (25.) Klip Kloof. Taaibosch Bergen, Wildschuts Bergen in the distance.
- (26.) The Koonap River. Kafirs on the Trek with all their "household gods."
- (27.) A large herd of Quaggas. Blue Wildebeests and Blesboks on the plains south of the Vaal River.
- (28.) Kafirs, having made their fortunes, leaving the Colony with all their property.
- (29.) Colonel Eyre's Division passing through the Camp of General Somerset, near Butterworth, with captured cattle driven by Butterworth Fingoes and Amaponda Kafirs.
- (30.) A distant view of the 74th Highlanders and Port Elizabeth Levies, storming the position of the Kafirs and rebel Hottentots in the Amatola Mountains. Fingoes plundering a Kraal, having found a concealed granary.
- (31.) A group of Bechuanas at their Kraal on the Vaal River, painted from life.
- (32.) Port Elizabeth. (Algoa Bay).
- (33.) Kafir Kraal near the Amatola painted on the spot.
- (34.) El Cabo Tormentoso (Cape Point), bearing N. by W.
- (35.) Wagon capsized crossing a drift between the Chumie Hoek and Eiland's Berg.
- (36.) Mr. J. O. Smith's Jetty, Algoa Bay. Surf boat coming on shore.
- (37.) Port Francis (now Port Alfred) Mouth of the Kowie.
- (38.) Fort Beaufort, from the West.
- (39.) Sketch near Block Drift, Kafir girl with basket of milk.
- (40.) Line Drift, Keiskama River.
- (41.) A visit from a Friendly Tribe. A present of sour milk.
- (42.) Bathurst, wagon crossing the drift.
- (43.) The Great Kei River, six or eight miles from its mouth.
- (44.) Mr. Gilbert's Farm near Fort Beaufort. The Kloof kloof.
- (45.) Rond Heuvel's Poort. Taaibosch Bergen.
- (46.) Descent of Mackay's Nek in the Zuurberg.
- (47.) A Troop of Wildebeeste near the Brandt Spruit's River.
- (48.) Interior of a Kafir Hut on the Great Kei, painted on the spot.
- (49.) Klaas Smits River: wagon crossing the drift.

- (50.) Old Golo Post and the drift below it.
- (51.) Gonah Hottentots performing Kafir dances—Zuurberg.
- (52.) Valley of the Mancazana, with the Kouap Hills.
- (53.) Kouap Drift, on the road to Fort Beaufort, from Graham's Town.
- (54.) Dagga Boer's Nek and Valley of the Baviaans River.
- (55.) A Hard Bargain. Bushman Chief and wives.
- (56.) King William's Town, Buffalo River, British Kaffraria.

WATER-COLOUR DRAWINGS.

240. Her Majesty the Queen.

H.M.S. Orontes leaving Simon's Bay with the body of the Prince^e Imperial of France, June 15, 1879; H.M.S.S. Active, Boadicea, Orontes, and Tenders firing minute guns.—By Catherine F. Frere.

241. Bairnsfather, K. C. PORT ELIZABETH.

- (1.) In the Veldt. (2.) On the Zwartkops, Evening. (3.) Algoa Bay, from Emerald Hill.

242. Frere, Catherine F.

- (1.) Series of paintings of Cape Wildflowers. (2.) Landscape drawings of various places in the Cape Colony.

243. Holland, Mrs. HAMPSTEAD, LONDON.
Cape Flowers.**244. Leslie, Harry (Master of the School of Art.)**

PORT ELIZABETH.

- (1.) The Valley, Port Elizabeth. (2.) Baaken's River, Port Elizabeth.
(3.) The Valley, Port Elizabeth.

245. Maclear, Augusta.

- (1.) Sketches of Cape scenery. (2.) Studies of Cape Flowers.

246. Marcus, H. C. MONTAGU.

- (1.) Montague Village during the Vintage. (2.) Birthday Cards. (3.) Series of drawings of Wild Flowers.

247. Morstatt, H. CAPETOWN.

Cape edible fishes; a series of thirty-six water-colour drawings.

See under Fishes.

248. Rothkugel, R.

Eight water-colour drawings of Cape Colony, &c.

249. Schröder, W. H. CAPETOWN.

Series of sketches of native chiefs and Malays, as follows—

- (1.) Mosheah, Basuto Chief. (2.) Magomo, Gaika Chief. (3.) Masupha, Basuto Chief. (4.) Siyolo, Islambie Chief. (5.) Sandili, Gaika Chief. (6.) Sarili (Kreli), Gcaleka Chief. (7.) Cetewayo, Zulu King. (8.) Zangalebalele, Zulu Chief, Hlubi Tribe. (9.) Dabulamanzi, Zulu Chief. (10.) Kamaldien, a Malay. (11.) A Malay Priest. (12.) Moos, a Malay. (13.) Dia'kwain, a Bushman. (14.) Sketch of a Gaika woman and child.

250. South African Fine Arts Association. CAPETOWN.

Seven water-colour drawings by the late T. W. Bowler.

- (1.) Table Mountain, from Robber's Island. (2.) The Native Hospital, King William's Town. (3.) The Booma Pass. (4.) Fort Armstrong. (5.) Knysna Estuary. (6.) Wolf River, Kafirland. (7.) Water Kloof.

251. Thwaits, Florence.

- (1.) Cape Fishes: A series of twenty water-colour drawings. (2.) Cape Flowers: A series of ten water-colour drawing.

252. Wavell, Mrs.

Cape Wild Flowers: A series of 150 water-colour drawings.

252a. Wright, H. C. S.

Kimberley Mine in 1875; Kimberley Mine under snow.

Water Hole, Kimberley Mine.

STUDENTS' PAINTINGS AND DRAWINGS.

253. School of Art, Cape Town.

Master, JAMES FORD.

Freehand Drawing	.	.	.	.	.	By Miss J. L. Forbes.
" "	(3)	.	.	.	.	" F. Pfister.
" "	(3)	.	.	.	.	" L. A. Cobern.
" "	.	.	.	.	.	" Thomas King.
" "	(3)	.	.	.	.	" Lucy Mason.
" "	(3)	.	.	.	.	" Miss Webb.
" "	.	.	.	.	.	" Miss J. C. Forbes.
" "	(2)	.	.	.	.	" J. R. Koller.
" "	.	.	.	.	.	" H. A. Tomkins.
Oil Painting from the Cast	.	.	.	.	.	" J. R. Koller.
" "	"	.	.	.	.	" Miss Steer.
" "	"	.	.	.	.	" Miss Murray.
Model Painting in Sepia	.	.	.	.	.	" Miss M. Dryden.
" "	"	.	.	.	.	" Miss A. B. Clayton.

Sepia Painting from the Cast (2)	By Miss M. Dryden.
" " " " (2)	" Miss Ross.
" " " " (2)	" Miss A. M. Clayton.
" " " " (2)	" Thomas King.
" " " " (2)	" Miss E. Clayton.
" " " " (2)	" Thomas Ninham.
Model Painting in Sepia (2)	" Thomas King.
" " " " (2)	" Miss A. M. Clayton.
Sepia Painting from the Cast (2)	" Miss A. B. Clayton.
Ornament Painting from the flat	" H. A. Tomkins.
" " " " (2)	" F. Pfister.
Sepia Painting from the Cast	" Miss E. J. Solomon.
" " " " (2)	" Miss A. B. Steer.
" " " " (2)	" F. Gray.
Figure Drawing in Chalk	" W. Cook.
Model Painting in Sepia	" J. Gray.
" " " " (2)	" J. R. Koller.
" " " " (2)	" Carl Gollhard.
" " " " (2)	" J. Gray.
" " " " (2)	" J. R. Koller.
Oil Painting of fruit	" "
Building Construction Examples	" "
" " " " (3)	" L. Cobern.
" " " " (3)	" W. Philips.
Machine Drawing	" J. Grindlay.
" (2)	" W. Arderne.
" " " " (3)	" W. Philips.
Freehand Drawing (3)	" Nellie Ashley.
" (4)	" C. D. Williams.
" " " " (3)	" T. W. Pfister.
" " " " (3)	" E. M. Ross.
" " " " (3)	" G. M. Ross.
" " " " (3)	" Clara Bradshaw.
Landscape Painting (Copy)	" Miss A. B. Clayton.
" " " " (3)	" Florence Sprigg.

254. School of Art, Graham's Town.

Master, W. H. SIMPSON.

Proteas	By Ethel Crozier.
"	" Marian Ayliff.
Strelitzias	" Lucy Irving.
"	" Beatrice Wood.
Proteas, &c.	" Gertrude Featherstone.
Old Building, Graham's Town	" Lucy Irving.
Flowers	" Margaret White.
Roses	" Emma Stirk.
Proteas	" Margaret White.
"	" C. S. Dingle.
Strelitzias	" Emma Stirk.
Arums	" C. S. Dingle.
African Nature	" Miss Webb.
Oil Painting, from the Flat	" Maud Trollip.
" " " " (2)	" Mary Amm.
" " " " (2)	" Annie Seidler.
" " " " (2)	" Lilian Wood.
" " " " (2)	" Lily Holland.
Oil Painting, from the Cast	" Maud Trollip.
" " " " (2)	" Margaret White.

Oil Paintings from Nature	By Norman Porter.
" " " "	" W. Burnett Stocks.
Chalk Drawing, from the Cast (2)	" Norman Porter.
" " " "	" Mary Borchersds.
" " " "	" Harriet Wall.
" " " "	" Annie Seidler.
" " " "	" Elene Bate.
" " " "	" Jessie Frames.
" " " "	" C. S. Dingle.
" " " "	" Owen Relly.
" " " "	" A. H. Griffiths.
" " " "	" J. Setherstone.
Water-Colour Drawing, from Nature (2)	" Margaret White.
Sepia Painting, from the Cast	" Maud Trollip.
Chalk Drawing, from the Cast	" Mary White.
Oil Painting, from the Flat	" Annie Seidler.
" " " "	" Mary Borchersds.
" " " "	" Annie Seidler.
Oil Painting, from Nature	" Lily Holland.
" " " "	" T. Webber.
" " " "	" Alice Longden.
" " " "	" A. Seidler.
Water-Colour Drawing, from Nature (5 drawings)	" W. Burnett Stocks.

255. School of Art, Port Elizabeth.

Master HARRY C. LESLIE.

Oil Paintings :—

Anemones	By Jessie Kirkwood.
Japanese anemones	„ Harriet Ablett.
Emerald Hill.	„ Ada Geard.
Fruit	„ Jessie Kirkwood.
“ Mliss ”	„ Jessie Kirkwood.
Fruit	„ Jessie Daly.
Panel painting, Flowers	„ Susan Dyason.
Proteas	„ Jessie Kirkwood.
Nasturtiums	„ Harriet Ablett.
Helianthus	„ Miss C. Hallack.
Fruit	„ Harriet Ablett.
Amalfi	„ Jessie Daly.
Arums	„ Harriet Ablett.
Arums	„ Miss Hallack.
Pelargoniums	„ Miss Sherman.
Orchids	„ Jessie Daly.
Evening	„ Harriet Ablett.
Apple blossom	„ Mrs. Burness.
Panel painting, Flowers	„ Jessie Kirkwood.
Bramble leaves	„ Kate Kingsmill.

Water Colours :—

River Scene	„ Jessie Daly.
Study of a Draped Figure	„ Jessie Kirkwood.
An Interior	„ Jessie Kirkwood.
Protea	„ Edith Pettit.
Loquats	„ Edith Pettit.
Street Scene	„ Edith Pettit.
Wild flowers	„ Mrs. Burness.
Bridge	„ Edith Pettit.
Freehand Drawings (3).	„ George Ainslie.

Freehand Drawings (3)	By D. H. Souter.
"	" H. A. Chase.
"	" Archibald Leggat.
" (2)	" Maud Parkin.
Freehand Drawing from Nature	" Miss M. Thomas.
"	" Jessie Daly.
Oil Painting, Flowers (4)	" Maud Edwards.
Water Colours from the flat (2)	" Miss Brister.
" " (4)	" Miss Z. MacGill.
"	" Miss Barnett.
"	" Miss Milton.
Chalk Drawing, from the Cast	" Miss F. Mitchell.
"	" Pemberton.
"	" Pemberton.
Etching, The Trio	" F. A. Jones.
Geometrical Drawing, 2	" Henry O. Tutt.
Freehand Drawing	" Pupil of Holy Rosary Convent.
"	" A. Gough.
"	" M. D. Johnstone.
Machine Drawing	" Henry O. Tutt.
" 2	" F. Craige.
Isometrical Projection	" Pupil of Holy Rosary Convent.
Building Construction	" J. Finlayson.
Freehand Drawing, 2	" J. Knox.
"	" Miss Wood.
"	" Pupil of Holy Rosary Convent.
Chalk Drawing	" E. France.
Pencil	" Edith Pettit.
Water Colour Drawing	" A. Kirkwood.
"	" Edith Pettit.

256. Branch of Port Elizabeth School of Art, Uitenhage.

Master HARRY C. LESLIE.

Horizontal Engine	By James Connerty.
Locomotive	" H. Connerty.

ARCHITECTURAL DRAWINGS.

257. Kimberley Local Committee. KIMBERLEY.

Drawings of Designs by Mr. Sydney Street, M.Inst.C.E., F.R.I.B.A., of buildings erected or about to be erected in the Colony, viz.:— (1) New Wesleyan Church, School and Parsonage at King William's Town; (2) New Wesleyan Church, School and Parsonage at Queenstown; (3) Town Hall, Grahamstown; (4) Dutch Church, Tarkastad; (5) New All Saint's Church, Beaconsfield, S.A.

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LONDON :

RICHARDS, GLANVILLE, AND CO.,

4, BROWN'S BUILDINGS, ST. MARY AXE.

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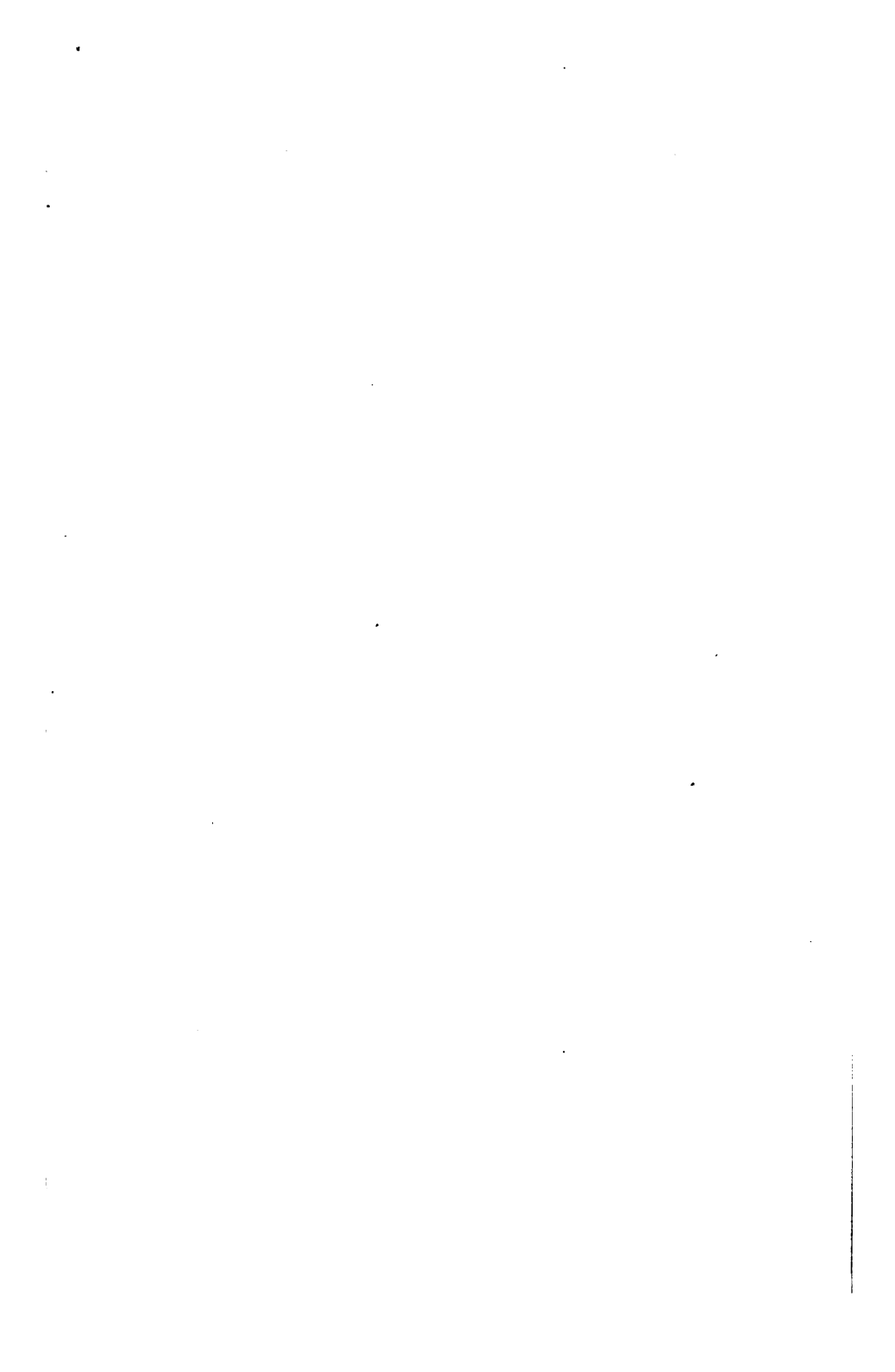
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